VESIT

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OCTOBER-DECEMBER
2023

**"** 5 Ts for finding unicorn startups are: Teams, Total Addressable Market, Timing, Technology, Traction

# UNICORN STARTUPS

ISSUE 91

# UNICORN STARTUPS

In the fast-paced world of startups, innovation is the name of the game. Every idea starts small, but with care and support it can grow into something extraordinary. At VES Institute of Technology (VESIT), we are proud to be at the forefront of supporting business and innovation through platforms such as the HABIT Incubation Center.

VESIT experienced an important moment in the last quarter of this year: the launch of the HABIT Incubation Center website. This virtual gateway serves as a portal that provides entrepreneurs with resources, training, funding opportunities, and partnerships to turn their ideas into successful ventures.

With the theme of this quarter's newsletter, "Unicorn Startups", we emphasize the importance of pursuing a dream and making it a reality. Just as a unicorn startup represents a rare breed of companies with a valuation of over a billion dollars, VESIT aims to nurture and support startups with the potential to achieve extraordinary growth and impact.

As we celebrate the Unicorn Startups theme in our quarterly newsletter, let's celebrate the journey of every entrepreneur who is willing to dream big and pursue their vision with unwavering determination. We believe that through the HABIT Incubation Center in support of innovation, the next unicorn startups will emerge from VESIT's vibrant ecosystem.

**Prachit Paralikar**
Deputy Student Chief Editor

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# EDITORIAL

**Gaurang Desai**
Student Chief Editor

Avishkar 2023-24 was organized by the University of Mumbai Department of Student's Development and VESIT in association with VESIT-IIC and VESIT-IQAC.

CSI-VESIT conducted an online event called Hidden Cipher on the 27th of November. The inauguration of ATAL-sponsored One Week Online FDP on "Tool and Techniques for Modern Data Science" was organized by the Department of Artificial Intelligence and Data Science at VESIT on 18th December. Department of Information Technology conducted a session on "Rise To Lead: Communication is Key" on 26th September. The Department of Master of Computer Application celebrated Innovation Day on 15th October. The Department of Computer Engineering and Codecell conducted an event titled "Introduction to Open Source" on 4th October. Department of Information Technology and QuestIT cell conducted a workshop called "Git Quest" on 4th October. AI CoLegion conducted Flutter Workshop on 1st and 3rd October. Along with CSI-VESIT, they also conducted a workshop titled "Decentralised 101: Unveiling Ethereum & Solidity" on 11th and 12th December. CSI-VESIT hosted 'Code Capture' on

26th and 27th December. IEEE-VESIT organized a workshop titled "J.A.R.V.I.S" on 21st and 22nd December. ISA-VESIT conducted a workshop on Database Connectivity in Web Development on 12th and 13th December. They also conducted "Tech Talk 2.0" on 21st December. ISTE-VESIT organized the "Spotify Clone Workshop" from 27th to 29th November and from 4th to 5th December. They also conducted a "Power BI" workshop on 19th and 20th December.

VESLit Circle organized a literature event 'Say No to Corruption, Commit to Nation', in collaboration with the Union Bank of India on 13th October. VESIT Sports Council organized the Senior Indoor Sphurti from 3rd October to 6th October and Junior Indoor Sphurti on 7th October. VESLang Circle conducted the Personal and Professional Achievement Program (P&PA) from 13th September to 21st October. On 27th November 2023, the VESIT Library organized a National Quiz in collaboration with the MCA Department and with the help of Dr. Ramesh Solanki (Assistant Professor, Department of Master of Computer Applications). VESIT Library in association with VESIT-IQAC and VESIT-IIC

organized a competition for the creation of reels or short videos about library services at VESIT on 15th October. SoRT-VESIT conducted Spectral 2023, a fundraiser event, from 3rd to 6th October, in collaboration with VESIT Music Council and VESLit Circle.

In the featured section, we have VESIT students, placed at different companies, sharing their placement experiences and any pieces of advice.

In VESIT Diaries, we have Mayuresh Sarpotdar (Batch of 2006, Department of Computer Engineering), an alumnus of VESIT, currently serving as the Executive Director at Morgan Stanley, sharing valuable insights into his career journey.

**Jessica Herrin**

*You have to see failure as the beginning and the middle, but never entertain it as an end.*

# HIGHLIGHTS

Eight students from VESIT, secured internships at Barclays, receiving a monthly stipend of Rs. 80,000. The rigorous interview process, starting in November 2023, involved coding, aptitude assessments, and Tech and HR interviews via MS Teams. VESIT proudly acknowledges the achievements of these students and extends gratitude to Barclays for their support.

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The inauguration of the ATAL sponsored One Week Online FDP on "Tool and Techniques for Modern Data Science" at VESIT, Chembur Mumbai, featured esteemed speakers and interactive sessions covering various aspects of data science. The program concluded with a valedictory function and online feedback session.

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The NVIDIA Deep Learning specialization workshop, led by Mrs. Sangeeta Oswal, covered four sessions on various topics including Fundamentals of Deep Learning and Applications of AI for Anomaly Detection. With over 175 participants, the workshop provided hands-on learning experiences and awarded certificates worth $500.

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ISA-VESIT hosted Tech Talk 2.0 on December 21, 2023, featuring Ms. Archita Malgaonkar, a Master's student from IIT Hyderabad. Archita shared her academic journey from VESIT to IIT Hyderabad, navigating challenges during the pandemic. The event concluded with a dynamic Q&A session, leaving participants inspired.

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Avishkar 2023-24, hosted by VESIT in collaboration with University of Mumbai, showcased 592 projects from 41 colleges. Notable dignitaries like Dr. Sunil Patil and Dr. Prashant Karande graced the inauguration. After rigorous judging, 30 projects advanced to the final round, marking a successful event.

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**06** *Distinguished dignitaries from the VES were present with the Chief Guests*

The VESLit Circle, with Union Bank of India, hosted 'Say No to Corruption, Commit to Nation' event on 13 October, 2023. Debates, poster-making, drama, essay writing, and a modified quiz were conducted, promoting student engagement.

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Senior Indoor Sphurti, from October 3rd to 6th, and Junior Indoor Sphurti on October 7th, 2023, were vibrant events featuring various indoor games, fostering camaraderie and sportsmanship among students. Winners and MVPs were honored across categories.

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The Personal and Professional Achievement Program (P&PA) by VESLang Circle ran from September 13th to October 21st, 2023, comprising twelve sessions over six weeks for First and Second year students. Alumni sessions provided insights from successful VESIT graduates. Positive feedback underscored the program's success in fostering personal and professional growth among participants.

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SoRT VESIT's Spectral '23, from October 3rd to 6th, 2023, partnered with VESIT Music Council and VESLit Circle, fundraised for Khushiyan Foundation, Thane. Activities included visits, games, 'Among Us', Escape Rooms, and an Open Mic Talent Aid, collecting around Rs. 70,300 for charity.

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**Inauguration of the Spectral '23**



**VESIT Music Council making the Spectral event extravagant**

# ACHIEVEMENTS

# Highlights of Placements for Batch of 2024

*~Prachit Paralikar*

The placement highlights for Batch of 2024 were Forcepoint and Dolat Capital with a lucrative offer of 14.5 LPA each. Following the lead was Nomura, Barclays, ISS offering 13.66 LPA, 13.3 LPA and 13 LPA respectively. Quicksell offered 12 LPA and Idfy offered 11 LPA. Trading Technologies offered 10 LPA. IBM also offered 10 LPA. ExxonMobil, a core company, offered 11.67 LPA. Nomura, Idfy and Equity Data Science also offered MCA students a salary package of 13.6 LPA, 8-10 LPA and 10 LPA each.

This year's placement drive included companies like Carwale, IVP, IIFL, Burns and McDonnell India, L&T Core, Worley Engineering, Arcon, Acucert, Saint Gobain, Deloitte, Amazon, DeltaX, TSS, Network Marvel, EY, Media.Net, Accenture, Sciative Solutions, Zeus Learning, Dark Horse Digital, Vector Consulting, Systemic Solutions, Rockwell Automation, Netcore, GEP, Godrej And Boyce, GCx, EPS, Indus Tower, RXO and Addend Analytics.

We also had core companies hiring from our college this year. These included Aker Solutions, Technip Energies, Johnson Control India, Tata Consulting Engineer, Galaxy Surfactants Ltd, Tecnimont ICB and Thyssenkrupp UIL.

The MCA Department also had a decent placement drive with companies like Alight, BNP Paribas, Adenza, ImpactSure, Ripplehire, Clariant, PayNearby, Wisdm Lab, Clevertap, Sapphire Tech, Sectona and Mobicule offering good packages.

The placement team under **Mr. A. Nagananda** (Training & Placement Officer, VESIT) and **Dr. Dashrath Mane** (Deputy Training & Placement Officer, VESIT) have expressed their gratitude to the Management, Principal, Vice-Principal, Heads of Departments, Placement In-charges, and Placement coordinators for their unwavering support and cooperation during the recruiting process and are optimistic that in the coming year students will get more opportunities for placements.



**(L-R): Placement team Mr. A. Nagananda (Training & Placement Officer, VESIT) and Dr. Dashrath Mane (Deputy Training & Placement Officer, VESIT)**



**(Top-Bottom, L-R): ISS offered 13 LPA, Quicksell offered 12 LPA, Idfy offered 11 LPA, Equity Data Science offered 10 LPA, and IBM offered 10 LPA**



**(Top-Bottom): Nomura offered 13.66 LPA, Barclays offered 13.3 LPA, and ExxonMobil offered 11.67 LPA**

# Barclays offers 80K Stipend to VESITians

*~Avan Shetty*

Eight students namely **Anagha Kulkarni** (TE-CMPN), **Vrushabh Ghuse** (TE-INFT), **Sarvadnya Awaghad** (TE-INFT), **Piyush Chugeja** (TE-CMPN), **Kinjala Ahuja** (TE-CMPN), **Niyati V. Gaonkar** (TE-INFT), **Simran Ahuja** (TE-CMPN), and **Abhinaya Danda** (TE-INFT) were selected for the prestigious internship at Barclays. A competit`ive stipend of Rs. 80,000 per month was offered to these students for the role of Summer Analyst.

The interview process commenced in November 2023. The first round, held on the 10th of November, comprised a coding and aptitude assessment, including 30 MCQs covering topics such as Java, JavaScript, C++, DBMS, Data Structure, Python, Servlets, and OS, alongside 5 SQL coding questions.

The second round took place on the 21st of November. It comprised a Tech and HR interview conducted via MS Teams. Candidates were quizzed on personal aspects, including hobbies, time management, and challenges faced. Technical questions delved into project details, deployment strategies, and societal impact. The interview concluded with an opportunity for candidates to pose queries.

VESIT proudly celebrates the remarkable achievements of these students, showcasing their talent and dedication during their internship journey at Barclays. We also express our gratitude to Barclays for their support and cooperation.



**(Top-Bottom, L-R): Selected students for internship, Anagha Kulkarni (TE-CMPN), Vrushabh Ghuse (TE-INFT), Sarvadnya Awaghad (TE-INFT), and Piyush Chugeja (TE-CMPN)**



**(Top-Bottom, L-R): Selected students for internship, Kinjala Ahuja (TE-CMPN), Niyati V. Gaonkar (TE-INFT), Simran Ahuja (TE-CMPN), and Abhinaya Danda (TE-INFT)**

# VESIT Hosts Mega Project Competition

~Brijesh Sharma

Avishkar Research Convention is the platform for the development of research culture and scientific temper among the students, scholars, and teachers from undergraduate to doctoral level. Avishkar 2023-24 was organized by the **University of Mumbai Department of Student Development** and **Vivekanand Education Society's Institute Of Technology (VESIT)** in association with **VESIT-IIC (Institition's Innovation Council)** and **VESIT-IQAC (Internal Quality Assurance Cell).** The zonal round for zone-X was conducted in VESIT which was distributed in two rounds, with 1st round being the Poster Presentation and the 2nd round being the PPT Presentation regarding the projects. From VESIT total 37 group participated in out of which **8 groups** where selected for **final round**

The convention was conducted on 15th December 2023 with **592 projects** from **41 colleges** across Mumbai being displayed on the premises of VESIT. The crowd of around 2000 students participated by registering themselves in the campus premises. The event was commemorated in the Auditorium with the inauguration ceremony. A video portraying VESIT was displayed to the students and the teacher coordinators. **Mrs. Arti Sawant** (Assistant Professor, Department of Electronics and Telecommunications Engineering) hosted the event and introduced the distinguished panel of dignitaries seated on the dais. The chief guests of the event were **Dr. Sunil Patil** (Director, Department of Students' Development, University of Mumbai), **Dr. Prashant Karande** (I/C Director, Board of Examination and Evaluation, University of Mumbai), and **Mrs. Minakshi Gurav** (District Coordinator, Avishkar Research Convention, University of Mumbai). The inauguration event started with the lamp lighting and Saraswati Vandana.

Further, the chief guests were felicitated followed by the welcome speech of **Dr. J.M. Nair**

(Principal, VESIT). She encouraged the students participating in the Avishkar competition by briefing them about the achievements of students of VESIT in previous Avishkar competitions. Then, Dr. Prashant Karande appreciated the participants by addressing them as extraordinary and talked about NEP (National Education Policy) and how it changed the education sector. He also spoke about the importance of teachers in students' education. Dr. Sunil Patil addressed the students and spoke about the success of the Avishkar Research



**Distinguished dignitaries from the VES were present with the Chief Guests**

Convention.

**Mr. B.L. Boolani** (Managing Trustee, VESIT) thanked the members of the University of Mumbai for organizing the event and providing students with a platform to showcase their creative ideas. **Dr. M. Vijayalakshmi** (Vice Principal, VESIT) delivered the vote of thanks to all the dignitaries present and the participating students and their teachers. The inauguration event concluded with the National Anthem.

Then, the judging of the posters started. Around **60 judges** shared their insights with the students and selected 60 projects from the 592 participating projects. The projects were distributed into six categories-

- Humanities, Language and Fine Arts Category
- Commerce, Management and Law Category
- Pure Sciences Category
- Agriculture and Animal Husbandry Category
- Engineering and Technology Category
- Medicine and Pharmacy



**Students presenting their PPT for round- 2**

The posters were displayed on each floor of the college starting from the 1st floor to 4th floor. Afterward, the 2nd round started with the presentations being held in classrooms. After the second round, 30 projects were selected. The results of the 2nd round were declared in the Amphitheatre

Each selected team was felicitated on the stage. The selected teams were instructed about the final round of the Avishkar Research Convention and the event concluded successfully.



**Glimpse of announcement of results for Round-2 by VESIT faculty members**

## TECH COMPETITIONS

# Finding the Hidden Cipher

~Meghna John

A fun online event called **Hidden Cipher** was conducted and organised by the Junior Council of CSI VESIT during the winter break of 2023-24 on the 27th of November. The event consisted of exciting technical as well as non-technical games, which were distributed in several rounds. A team event required the participants to hone their communication and coordination skills to work together to beat the challenging competition. A total of 22 teams participated, and the elimination of teams occurred after every round, but the eliminated teams were free to stay around to spectate and enjoy the event. This event was hosted by CSI's Junior Council namely **Anish Padhye** (SE-EXTC), **Shubham Jha** (SE-INFT), **Ayush Bohra** (SE-AIDS) and **Simran Godhwani** (SE-CMPN).

The teams were provided with 4 password-protected PDFs in Round 1 called Tech Trek. An elusive and enigmatic riddle was presented by the host, the answer to which was the password of the first PDF. Upon solving the challenges in the first PDF, the participants could find the answer to the

password of the next PDF, and so on. The last PDF had a Google Form link the participants had to complete to qualify for the second round. After a thorough explanation of the rules by the host, Tech Trek began in an exciting and adventurous fashion.



**CSI Council Explaining Rules of Hidden Cipher**

The first 8 teams to finish The Trek were introduced to the next round called CodeBreakerChase. Even though it was a non-technical round, its challenges were no less difficult than those of the technical games in Round 3 to follow. Every team was allotted a question set, which consisted of an interrogative sentence encoded in

various forms like an anagram, cryptogram, and bifid cipher. Upon decoding the sentence and finding the question which was in turn another riddle, the participants had to find its answer and encode it back again using the bifid cipher.



**(Top-Bottom, L-R): The winners of the event Anuj Bagad (BE-CMPN) and Nishtha Batra (BE-CMPN) followed by the runner up team consisting of Saniya Dangat (SE-CMPN) and Tanisha Pandit (SE-CMPN)**

The hosts kept the round interesting by provoking the participants and tempting them with hints. Using hints resulted in a time penalty of 30 seconds. Out of the three teams moving on to the final round, the third team barely made it through due to the close competition among the teams. Cipher Rush, aka the ultimate and the most anticipated round, began with 3 teams competing for the grand prize of an Amazon Gift Card.

The winners of this event **Anuj Bagad** (BE-CMPN) and **Nishtha Batra** (BE-CMPN) followed by the runner up team consisting of **Saniya Dangat** (SE-CMPN) and **Tanisha Pandit** (SE-CMPN). With a blend of technical and non-technical challenges, the event showcased teamwork, problem-solving, and creativity. Overall, the Hidden Cipher event organised by the Junior Council of CSI VESIT proved to be a dynamic and engaging competition of wits!

## TECH UPSKILLING

# Learning has no Age

*~Srushti Chopade*

The inauguration of ATAL sponsored One Week Online FDP on **"Tool and Techniques for Modern Data Science"** was organised by the Artificial Intelligence and Data Science Department at VESIT, Chembur Mumbai. The event was scheduled on 18th December 2023. The function has started in presence of dignitaries and participants with lighting the digital lamp in front of Maa Saraswathi.

Guest and dignitaries list for the inauguration function included **Dr. (Mrs.) M. Vijayalakshmi**, Vice Principal (VESIT), **Dr. (Mrs.) Anjali Yeole** (Deputy Head, Department Artificial Intelligence and Data Science ) and the participants. Dr. (Mrs.) M. Vijayalakshmi gave a Welcome Note and motivated participants with her speech.

The first day of the program consisted of Session 1 and session 2 was taken by **Mr. Gavrav Tirodkar**, a Data Scientist at Western Digital conducted a session focused on Dataiku fostering efficient and effective development in the field of machine learning. Followed by lab session conducted by **Mrs. Snageeta Oswal**, (Assistant Professor, Department of Artificial Intelligence and Data Science) on "Python for data science".



L-R, Top-Bottom: Speakers of the event, Dr. Narendra Shekokar, Gaurav Tirodkar, Kunal Khandelwal, Neel Gala, Nilesh Bane, Shridhar Chandra Mohan Iyer

On the second day of the program two distinguished speakers shared their expertise. In Session 1, **Mr. Nilesh** provided valuable insights into Data Engineering, covering essential topics such as Data Engineering, Google Cloud SQL, and BigQuery.

Session 2, titled "AI and Cybersecurity for Educators," Professor **Dr. Narendra Shekokar** from DJSOE delivered a comprehensive presentation, thoroughly addressing various aspects of data security within the realm of artificial intelligence and cybersecurity.
Followed by a lab session conducted by Dr. Anjali Yeole (Artificial Intelligence and Data Science Department )

The third day of the program was conducted by speaker, **Mr. Kunal Khandelwal**. The sessions started with Supervised Learning and Unsupervised Learning Algorithms and various
applications using Matlab. He
explained, deep Learning and neural networks various examples with image and text inputs using Matlab.

On the fourth day Session 7 was delivered by, Prof. **Sridhar Chandramohan Iyer** on
Digital forensic in data science applications. The lecture on digital forensics in data science applications explores the synergy between investigative techniques and data-driven methodologies. The next session 8 was conducted by Mr. Kunal Khandelwal on Model InterpretabilityMatlab.The session on model interpretability using MATLAB provides an overview of techniques to enhance understanding and transparency in machine learning models.

On the fifth day as a part of the program we visited Cere Lab Pvt.Ltd industry. Cere Lab specializes in data analysis, catering to various industries with customized solutions.The adept data science team showcased expertise in analyzing diverse datasets and deriving valuable insights.The visit provided valuable insights into how similar methodologies and tools could be integrated into curriculum development to equip students with relevant skills.

Session 9 was the online session on Generative AI.Conducted by **Mr. Koustubh Shirke**, Senior Application Engineer at MathWorks. Session provides an overview of the principles and applications of generative artificial intelligence (AI).

On the sixth day of Session 10 was delivered by **Mr. Neel Gala** Associate Director ,Whizfy, on Big Data and Distributed Computing for DataScience. Participants gained insights into scalable storage solutions, data processing frameworks, and the significance of distributed computing in handling large datasets efficiently.
As it is the sixth and last day of the program, the feedback and valedictory function marked the successful conclusion of an insightful and hands-on training initiative.

The function began with dignitaries and participants, ending with a vote of thanks from Dr. **(Mrs.)** Anjali Yeole (Deputy Head, Department Artificial Intelligence and Data Science ) . An online feedback and final quiz were conducted, with compulsory attendance and passing required for certification, alongside immense efforts from the technical committee and FDP teams.



**(L-R): Dr. (Mrs.) Anjali Yeole (Deputy Head, Department Artificial Intelligence and Data Science), Mrs. Snageeta Oswal, (Assistant Professor, Department of Artificial Intelligence and Data Science), Dr. (Mrs.) M. Vijayalakshmi Vice Principal (VESIT) were the coordinators in this event.**

# Unlocking the Power of Communication

*~Vinit Solanki*

In the fast-paced world of today, where effective communication reigns supreme, the Department of Information Technology at VESIT took a proactive step towards nurturing the communication skills of its students. On the 26th of September 2023, the department hosted a transformative session titled **"Rise To Lead: Communication is Key"** Led by **Ms. Rayana Pandey** (Corporate Trainer and Company Director, Mobius Strip Mumbai), the workshop aimed to in still a basic awareness of the significance of soft skills in professional and interpersonal communications.

The overarching objective of the session was to foster an all-round development of personality among the participants, emphasizing the vital role of communication in personal and professional spheres. The workshop served as a platform for students to hone their communication prowess.

Spanning over 2 hours, the session delved into various facets of communication, equipping participants with practical insights and techniques to enhance their verbal and non-verbal communication skills, active listening abilities, and public speaking prowess.

Participants were guided through exercises aimed at refining vocabulary, language fluency, and sentence structuring. Emphasis was placed on clarity, simplicity, and precision in speech, empowering students to articulate their ideas effectively.



**Speaker of the session Ms. Rayana Pandey**

The significance of body language, facial expressions, and gestures in communication dynamics was explored. Through role-playing activities, students gained an understanding of how non-verbal cues can influence the outcome of communication interactions.

Active listening, a cornerstone of effective communication, was honed through exercises focused on paraphrasing, clarifying, and summarizing. The session underscored the importance of empathy and understanding in fostering meaningful dialogue.

Strategies to conquer stage fright and deliver compelling speeches were shared, alongside guidelines for structuring impactful presentations. Through mock speeches and constructive feedback, participants honed their public speaking skills, emerging as confident and persuasive communicators.

The workshop aimed to develop and enhance a spectrum of qualities, including communication skills, confidence, emotional intelligence, self-awareness, leadership abilities, and interpersonal skills. Empowering individuals to leverage the power of effective communication, the session laid the groundwork for personal growth and professional success.

The "Rise To Lead" workshop proved to be a pivotal moment in the journey of the participants, equipping them with invaluable skills to navigate the complexities of communication with finesse and confidence. By fostering an environment of learning and growth.

# Cycle of Innovation

*~Meghna John*

The MCA department of VESIT celebrated **Innovation Day** on October 15, 2023. The event was attended by MCA Students. The objective was to celebrate the birth anniversary of the former President of India, Bharat Ratna Dr. A.P.J. Abdul Kalam, and inspire young innovators to innovate for India.

First, one of the students gave the introductory speech, welcoming **Dr. Davendranath Gokulnath Jha**, the esteemed event speaker, and informed the students about the purpose of the event.

Then, Dr. Davendranath Gokulnath Jha took charge and shared his insights into the field of Data Science & Technology. He spoke about how businesses operate, the manner in which entrepreneurship development influences innovation, the significance of data analytics and data science, the distinction between improvement and innovation, how digitization impacts innovation and improvement, and the major scenarios that unfolded during the COVID-19 pandemic.

Dr. Davendranath Jha sir also covered major topics like how Technology can accelerate transformation, how & why innovation is restricted to needs and budget & the latest trends and developments in the industry, and how students can prepare themselves to take advantage of these opportunities.

After the presentations, there was an interactive session where the students had the opportunity to ask questions and clarify their doubts. The interaction was lively and informative, and the students got valuable insights into the world of work and the importance of innovation and entrepreneurship.

Overall, the Innovation Day on the birth anniversary of former President of India, Bharat Ratna Dr. A.P.J. Abdul Kalam by the MCA department was a highly successful event that achieved its objectives of inspiring students and promoting Innovation and entrepreneurship. The department hopes to organize similar events in the future to provide more opportunities for students to learn from industry experts and develop their skills.



**Poster of the event**

# Hacking Into October With Hacktober!

*~Meghna John*

To cater to the ever-growing demand for fostering innovation and collaboration within the realm of open source technology, the Computer Department, in conjunction with the CodeCell team, orchestrated a captivating event titled **"Introduction to Open Source"** on 4th October 2023, in Classroom B32. This was the first of the three events of Hacktoberfest'23 which aimed to ignite the spark of curiosity and creativity in attendees by introducing them to the world of open source and its transformative potential.

The Speaker for the event were **Dhananjay Pai** (BE-CMPN) and **Latish Advani** (SE-CMPN). The event kicked off at 3:00 pm, with the introduction of speakers. The primary objective of this session was to unravel the concept of open source, shedding light on the fact that open source is not just about code, but also about collaboration, innovation, and community. As Hacktoberfest is an ode to open-source projects, their maintainers, and the vast contributor community.

The event was structured around a comprehensive series of topics.The session began with a clear and concise explanation of what open source is. It demystified the concept, highlighting its core values, such as transparency, collaboration, and accessibility.To illustrate the diversity of open source, the speakers presented a selection of well-known open source tools and their areas of application. This practical approach allowed students to connect theory with real-world examples. Exploring renowned open source platforms and programs such as Linux, Apache, Mozilla Firefox, and others provided a comprehensive perspective on the evolution of Open source.The event aimed to inspire students by showcasing the myriad opportunities from contributing to projects that align with personal interests to forge a career in the field.Open source's unparalleled advantages, such as skill development, networking, and giving back to the community, were underscored throughout the event.

The inaugural event of Hacktoberfest'23, an exceptional dive into the world of open source, concluded with participants expressing their enthusiasm and engagement through overwhelmingly positive feedback. Moreover, a highly informative and engaging Q&A session at the event's conclusion further clarified concepts for the eager audience, enhancing their overall experience.



**(L-R): Speakers of the event, Dhananjay Pai (BE-CMPN) and Latish Advani (SE-CMPN)**

# A Dive into the Git Quest

*~Vinit Solanki*

The world of technology is an ever-expanding universe, and to navigate it successfully, a fundamental understanding of tools like Git and Github is crucial. Recognizing this, the IT Department at VESIT, in collaboration with QuestIT Cell, orchestrated an enlightening workshop - **"Git Quest"**. Held on October 4th, 2023, from 2:00 pm to 5:00 pm, the workshop aimed to unravel the intricacies of Git and Github, providing a platform for both novice and seasoned developers to enhance their skills.

The mastermind behind orchestrating this insightful event was **Mrs. Charusheela Nehete** (Assistant Professor, Department of Information and Technology), the coordinator who ensured the smooth execution of the workshop. Her dedication to fostering a culture of learning within the IT community at VESIT was evident throughout the event.

The workshop, conducted by QuestIT BEs, TEs, and SEs, commenced at 2:00 PM, immersing participants in a journey through the realms of Git and Github. The agenda was thoughtfully curated to cover diverse topics, from open sourcing and global programs like Hacktoberfest and GSOC, to the nitty-gritty of utilizing Git and Github effectively for collaboration in real-world projects. Participants were introduced to the concept of open sourcing, elucidating how contributions to open source projects can not only build a network but also pave the way for future opportunities such as internships and jobs

A significant chunk of the workshop was

dedicated to understanding Git - the version control tool that lies at the heart of collaborative software development. Attendees gained valuable knowledge on the basic flow of collaboration, various Git commands, and the art of merging and branching to keep source code clean.



**Poster of the event**

The participants were guided through the effective utilization of Github, understanding how to host remote repositories and collaborate seamlessly with other developers. Practical insights were shared, ensuring that attendees comprehended the synergy between Git and Github.

The workshop bore fruit in the form of enriched knowledge, skills, and a newfound confidence among the participants. Key outcomes included a comprehensive introduction to open source, exposure to global programs, a deep understanding of Git, and proficiency in utilizing Github for collaborative projects.

A total of 35 students from SE actively participated, with Mrs. Charusheela Nehete representing the faculty contingent. The engagement and enthusiasm displayed by the participants showcased the success of the workshop in bridging the gap between theoretical knowledge

and practical application.

As the academic year 2023-2024 unfolds, the echoes of the Git Quest workshop will resonate in the corridors of VESIT, motivating students to embark on their coding odyssey with confidence and competence.



**Coordinator of the event, Mrs. Charusheela Nehete (Assistant Professor, Department of Information and Technology)**

# Let's Learn AI

*~Srushti Chopade*

The event, **NVIDIA Deep Learning specialization workshop** consisted of a series of four sessions of NVIDIA's Instructor Lead Deep Learning Institute (DLI) course.

The event broadly included 3 topics: Fundamentals of Deep Learning, Applications of AI for Anomaly Detection.

The speaker of the workshop was **Mrs. Sangeeta Oswal** (Assistant Professor, Department of Artificial Intelligence and Data Science) who is Asia Pacific Ambassador for NVIDIA - Deep Learning Institute (DLI).

The first series was Fundamentals of Deep Learning held on 19 August 2023 on google meet from 10 am to 4 pm. The session witnessed an impressive turnout of over 175 participants. Delving

into the 'Fundamentals of Deep Learning,' this session provided hands-on learning opportunities. The second series was of Applications of AI for Anomaly Detection held 17 September 2023 on Google meet from 10 am to 4 pm. Delved deep into the field of 'Application of AI for Anomaly Detection.' Participants learned how AI can be used to identify unusual patterns or deviations in data, a crucial skill for various industries such as manufacturing and cybersecurity.

The third session was of Applications of AI or Predictive Maintenance held on 7 October 2023 on google meet from 10 am to 3:30 pm.' This session introduced participants to the world of predictive maintenance, where AI plays a pivotal role in forecasting equipment failures and optimizing maintenance schedules.



**Speaker of the workshop, Mrs. Sangeeta Oswal (Assistant Professor, Department of Artificial Intelligence and Data Science)**

The participants were provided with the certificates of appreciation worth **$500**. This series of DLI workshops not only imparted valuable knowledge but also equipped participants with practical skills relevant to the field of deep learning and artificial intelligence.

# AI CoLegion's Impactful Flutter Integration

*~Vinayak Panchal*

AI CoLegion recently orchestrated a groundbreaking two-day **Flutter workshop** tailored for second-year AIDS students, seamlessly integrating it into their curriculum. Steering the event was **Shreeprasad Navare** (TE-AIDS). The resounding success of the workshop was evident through the active participation of over **90 students,** underscoring the event's significance.

The first session, held online via Google Meet on 1st October 2023, marked the commencement of the workshop. Running from 10 am to 1 pm, the session delved into the foundational aspects of Flutter and Dart. Participants immersed themselves in understanding various widgets and UI components, gaining crucial insights into effective state management within the Flutter framework. Throughout this enlightening session, the technical assistant team from AI CoLegion played a pivotal role, providing invaluable support that fostered a highly interactive and engaging learning environment. The positive feedback received from participants underscored the success of this initial exploration into Flutter's fundamentals.

The momentum continued with the second session on 3rd October 2023, hosted in the B21 Classroom at 3 pm. This hands-on experience extended for two hours, covering advanced topics crucial for Flutter app development. These topics ranged from efficient app navigation to seamless data transfer between pages, designing sleek layouts for

complex data presentation, implementing intuitive gesture controls, and exploring the intricacies of Dot Push and Dot Push Replacement Navigation. The session culminated in an engineering visualization project using Flutter, adding a practical dimension to the participants' learning journey.



**Speaker of the event, Shreeprasad Navare (TE-AIDS)**



**Doubt solving done by team of AI Colegion**

Both sessions collectively elevated participants' understanding of Flutter, imparting not just theoretical knowledge but also practical skills indispensable for app development. The success

of the workshop was attributed to the expertise of Shreeprasad Navare and the unwavering support of the technical assistant team from AI CoLegion. Beyond mere theoretical enrichment, the workshop empowered second-year AI&DS students with practical skills, aligning them with the demands of the ever-evolving field.

In conclusion, this Flutter workshop series seamlessly integrated into the academic curriculum not only added tangible value but also equipped students with valuable skills. The Flutter workshop stands as a beacon, guiding second-year AI&DS students towards a future enriched with knowledge, and skills.



**Speaker Shreeprasad Navare teaching various UI elements of AI Colegion**

# Extravagant Web 3.0 Workshop

*~Nikunj Pal*

In a pioneering collaboration, the CSI-VESIT teamed up with AI CoLegion to host an enlightening workshop titled "**Decentralised 101: Unveiling Ethereum & Solidity,**" conducted seamlessly through online mode on the 11th and 12th December 2023 from 1 to 4 pm. This workshop aimed to unravel the intricacies of Web 3.0 and its applications, providing participants with a comprehensive understanding of the technological advancements shaping our future.

The two-day event featured distinguished speakers, **Gaurang Mapuskar** (TE-INFT), Co-chairperson at CSI-VESIT, and **Harsh Jain** (TE-AIDS), Deputy Secretary at AI CoLegion, who expertly navigated the audience through the realms of Web 3.0, blockchain, and Solidity.

Gaurang Mapuskar took the reins on the first day, commencing with a foundational introduction to Web 3.0 and blockchain. Fundamental concepts like the UTXO model and Merkle tree set the stage for a deep dive into the structure and intricacies of blockchain mining. The discourse seamlessly transitioned to Ethereum, elucidating its benefits, and delving into topics such as Ethereum gas. Gaurang elucidated the concept of Decentralized Applications (DAPPs) and their architecture, offering insights into the functioning of JSON Parser and exploring tools like Ether.js for Ethereum Blockchain development. The interactive session included addressing queries from the engaged audience.
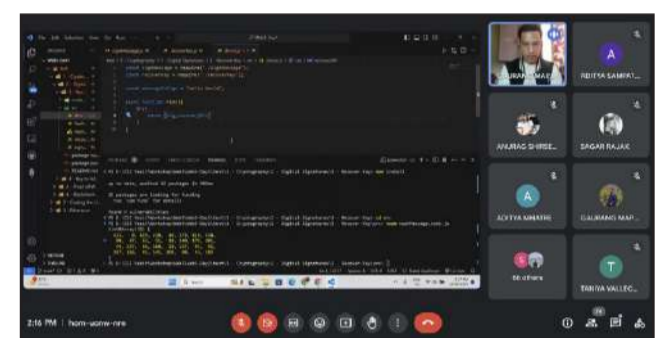
Harsh Jain took charge on the second day, focusing predominantly on Solidity, its functions, and syntax. Building upon the foundational knowledge shared on day one, Harsh conducted an immersive hands-on session by creating a social media DAPP using the Remix software. The session included discussions on smart contracts in Solidity, showcased the development of a basic calculator, and culminated in the creation of a Twitter clone using Web3 technology. Harsh's guidance, coupled with the support of the Webtech team, ensured that participants could actively engage in building their projects, fostering a collaborative learning environment.

In conclusion, the workshop, "Decentralised 101: Unveiling Ethereum & Solidity," emerged as a resounding success. Participants not only gained valuable insights into the realm of Web 3.0 but also had the opportunity to actively apply their knowledge in a hands-on setting. The collaboration between CSI-VESIT and AI CoLegion proved to be a synergistic partnership, providing a platform for both students and the CSI team to explore and embrace the future of technology.



**(L-R): Speakers of the event, Co-chairperson at CSI-VESIT, Gaurang Mapuskar (TE-INFT), and Deputy Secretary at AI CoLegion, Harsh Jain (TE-AIDS)**



**Gaurang Mapuskar (TE-INFT) explained Architecture of Web 3.0**

# Python Coding thrive

*~Avan Shetty*

In a dynamic two-day workshop, CSI-VESIT hosted **'Code Capture'** on 26th and 27th December 2023, from 3.00 p.m. to 5.00 p.m., immersing students in the realms of OpenCV and Python essentials. Led by the speakers **Sami Thakur** (SE-AIDS), **Aditya Sampathkumar** (SE-INFT), **Karan Bhatia** (SE-CMPN)**,** and **Ashish Patil** (TE-AIDS)**,** the workshop went beyond the conventional, aiming to spark curiosity and creativity.

The inaugural day commenced with an exploration of fundamental Python concepts, delving into variables, data types, operators, and loops—crucial building blocks for the coding odyssey ahead. Aditya Sampathkumar showcased image manipulation essentials, while Ashish Patil covered image and video manipulation, culminating in a captivating Face Recognition website creation. The atmosphere buzzed with enthusiasm as participants engaged in hands-on activities facilitated by the interactive Codeshare platform.
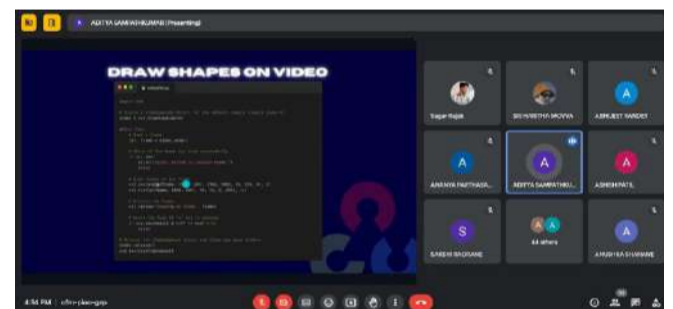
On the second day, the focus shifted to building the Gesture Suite website using OpenCV, MediaPipe, and PyAutoGUI, introducing students to advanced applications. The speakers, Karan Bhatia and Ashish Patil, seamlessly applied prior knowledge, creating a mind-blowing website and an interactive Rock-Papers-Scissors game.

The workshop's success lay in its blend of engagement and instruction, ensuring participants were ready for intricate projects. 'Code Capture' not only provided an exhilarating programming journey but left students with valuable insights, making it an unmissable adventure in the realm of coding and creativity, transforming vacation days



**Speaker Karan Bhatia (SE-CMPN) showcasing the working of rock paper and scissor**



**Aditya Sampathkumar (SE-INFT) explaining about iamge manipulation**

# Crafting J.A.R.V.I.S. with IEEE-VESIT

*~Riya Varyani*

J.**A.R.V.I.S** was organized by the IEEE-VESIT. This workshop was conducted on the 21st and 22nd of December 2023. This engaging and informative workshop was seamlessly conducted through the online platform Google Meet. The scheduled sessions occurred from 11:00 am to 1:00 pm. This educational event lasted for 2 hours and 30 minutes on the first day of the workshop and 2 hours on the second day.

The speakers of this event were college students from VESIT. These diligent and hardworking students of the college introduced various topics, all geared towards enhancing knowledge and skills in the field of A. I and coding languages. The speakers of this events were **Veydant Sharma** (SE-INFT), **Shreyash Das** (SE-ECS), **Sneha Sumbe** ( TE-INFT) and **Ashutosh Mishra** ( BE-CMPN).



**Poster of the event**



**(Top-Bottom, L-R): Speakers of the event, Veydant Sharma ( SE-INFT), Shreyash Das ( SE-ECS), Sneha Sumbe (TE-INFT) and Ashutosh Mishra ( BE-CMPN).**

There were around 60 participants in this beginner friendly workshop where students learnt the basics of NLP and created their very own J.A.R.V.I.S that can help them in their day-to-day activities

The workshop on Natural Language Processing provided an immersive learning experience, empowering participants to delve into the realm of artificial intelligence. During the workshop, attendees were actively involved in a hands-on session where they not only gained insights into the intricacies of Natural Language Processing but also had the opportunity to apply their knowledge by creating their own J.A.R.V.I.S, an A.I.-based desktop assistant.

# Mastering Database Connectivity

*~Vinit Solanki*

In the ever-evolving landscape of web development, the heartbeat of a dynamic website lies in its ability to seamlessly interact with databases. Recognizing the significance of this synergy, ISA-VESIT recently orchestrated an enlightening two-day workshop that delved into the intricacies of **Database Connectivity in Web Development.**

The inaugural session by **Tanvi Saraf** (TE-INFT) set the stage with a deep dive into theoretical insights on Database Management System (DBMS). Concepts such as data models and normalization were expertly elucidated, providing participants with a robust foundation for the hands-on experiences that followed. **Aastha Jajoo** (TE-INFT) seamlessly transitioned the workshop into practical terrain, steering participants through the intricate landscape of MySQL Workbench. Her session was an immersive journey to creating tables, adding values, and maneuvering through the nuances of MySQL Workbench with finesse.

**Om Shetye** (TE-EXTC) concluded the day with an advanced exploration of MySQL Workbench, focusing on database joins. This sequential approach ensured that participants not only grasped theoretical knowledge but also acquired practical proficiency on the very first day.

The second day kicked off with **Vishakha Singh** (TE-CMPN) provided a roadmap for creating a website. Her insights into the pivotal role of Node.js in the web development process laid the groundwork for the practical sessions to come.


**Poster of the event**

**Anushka Shirode** (TE-CMPN) took the reins, guiding participants through the intricate connection between backend and frontend. Her session included a comprehensive exploration of database connectivity, demonstrating how to establish connections, execute queries for data extraction, and insert data effectively.

The real-world application came to life as the mentor navigated through a shopping website created by the team. Participants actively engaged in the workshop, witnessing the implementation of key functionalities such as user registration, login procedures, and the addition of products to a virtual shopping cart.

The workshop seamlessly bridged the gap between theoretical knowledge and practical application in the realm of database connectivity. Participants left with a newfound confidence in implementing database solutions for web development projects. The engaging discussions, interactive sessions, and collaborative learning environment contributed to making the workshop a resounding success.


**(Top-Bottom, L-R): Speakers of the event, Anushka Shirode (TE-CMPN), Aastha Jajoo (TE-INFT), Om Shetye (TE-EXTC), and Vishakha Singh (TE-CMPN)**

# Tech Talk 2.0: Semiconductor Odyssey

*~Vinayak Panchal*

The hallowed halls of ISA-VESIT resonated with intellectual fervor on December 21, 2023, as the institution played host to Tech Talk 2.0. This captivating online event, conducted via Google Meet from 3 pm to 5 pm, featuring the esteemed **Ms. Archita Malgaonkar** (Batch Of 2022, Department of Electronics Engineering), a Master's student specializing in Semiconductor Materials and Devices at IIT Hyderabad.

The Tech Talk unfolded as Archita took the audience on a compelling journey through her academic evolution, from a VESIT undergraduate to her current pursuit of advanced studies at one of India's premier institutions. She shared the pivotal decision to specialize in electronics over information technology during her undergraduate years, culminating in the successful completion of her Bachelor's degree in 2022.

The narrative took a fascinating turn as Archita delved into her preparation process for pursuing a Master's degree, navigating the challenges presented by the unprecedented circumstances of the COVID-19 pandemic. Her insights into the advantages and disadvantages of this period showcased not only her academic prowess but also her resilience and adaptability.

Visual representations provided a window into Archita's life at IIT Hyderabad, seamlessly transitioning into the technical aspects of her expertise. The audience was treated to an in-depth exploration of semiconductor trends, with a focus on Electronic Devices and Circuits, emphasizing the significance of both digital and analog circuits. Archita also shed light on digital programming languages such as Verilog, captivating the audience with her knowledge.

A substantial portion of the talk was dedicated to the VLSI spectrum, where Archita elucidated the seven key steps, including RTL design and front-end development. Her journey into the professional realm unfolded as she detailed her transition to a Design Engineer role at Intel Tech, providing valuable insights into internship and job scenarios in the VLSI field. Participants gained a profound understanding of the evolving landscape of India's VLSI market over the next 2-3 years.

The event reached its zenith with a stimulating Q&A session, allowing participants to directly engage with Archita. Her articulate responses spanned a spectrum of doubts and queries, enriching the event and concluding it on a highly informative note.


**Poster of the event**

The event not only illuminated the complex world of semiconductor materials and devices but also inspired the audience to embrace challenges with resilience and adaptability, embodying the spirit of intellectual pursuit that defines ISA-VESIT.

# Cloning the Music Marvel - Spotify

*~Brijesh Sharma*

ISTE-VESIT organized the S**potify Clone Workshop** exclusively for its members consisting of frontend designing from 27th to 29th November 2023 and backend on 4th and 5th December 2023. It focused on developing a Spotify clone, using technologies like React.js, HTML, Tailwind CSS for frontend, and Flask, Python for backend. Attendees were guided through practical coding sessions. Two meets were held simultaneously each day along with the breakout room for solving the queries ensuring the smooth functionality of the session.

On Day 1, the speaker, **Susmita Santi** (TE-INFT), and **Nilesh Balotiya** (TE-INFT), both Junior Technical Officers of ISTE-VESIT, commenced the session with a frontend overview focusing on the technologies integral to constructing a music streaming service. The discussion encompassed establishing a React setup, delving into the fundamentals of Tailwind CSS, creating a Sidebar Component with Routing, and implementing Bottom bar styling. These components collectively housed the Home Page, Search Page, and user playlists.

During Day 2, participants were familiarized with the functionalities and architecture of Spotify. The session included an in-depth discussion on the Context API and concluded with the completion of the Bottom Bar Component, incorporating song-playing logic through the utilization of useState and useEffect Hooks. On the third day,

the agenda comprised the design aspects of the Song Card, as well as the Home Page and the Search Page. Participants delved into the creative process of crafting visually appealing and user-friendly interfaces for these components which were instructed by the Junior Technical Officers, **Abhinaya Danda**(TE-INFT), and **Shashwat Tripathi** (TE-INFT).



**Poster of the event**

The workshop reached its conclusion with two days dedicated to backend sessions instructed by the Juniot Technical Officers, **Aum Kulkarni** (TE-AIDS), and **Rishabh Gupta** (TE-AIDS). These sessions encompassed discussions on creating and utilizing APIs using Flask, the implementation of song creation and searching functionalities from the backend, as well as the development of a Song Recommendation system using databases and data parsing with Python.

In the frontend sessions, the emphasis was on instructing participants in the creation of user-friendly interfaces. The focus extended to implementing interactive features such as music playback and search functionality, along with troubleshooting UI-related issues. On the other hand, the backend sessions delved into server-side programming, database integration, and API development specifically tailored for music playback.

Overall, the workshop proved out to be a success because of the efforts and hardwork of the organizers and facilitators from ISTE-VESIT and the enthusiasm and active participation of the attendees.



**(Top-Bottom, L-R): Speakers of the workshop-Aum Kulkarni (TE-AIDS), Rishabh Gupta (TE-AIDS), Shashwat Tripathi (TE-INFT), Abhinaya Danda (TE-INFT), Nilesh Balotiya (TE-INFT), and Susmita Santi (TE-INFT)**

# Visualizing Data with Power BI

*~Joanna Sanju*

ISTE-VESIT conducted a two-day online **Power BI workshop** held on 19 December 2023 and 20 December 2023 by ISTE-VESIT aimed to provide participants with comprehensive insights into Power BI tools and their practical applications in Data Analysis and Visualization.

The hosts for the event were **Kinjala Ahuja** (TE-CMPN) and **Swati Dubey** (SE-AIDS) for day 1 and **Kareena Lachhani** (SE-CMPN) and **Vishwajeet Panaskar** (SE-ECS) for day 2. The speakers for day 1 were **Ruchir Jain** (TE-CMPN) and **Aditya Nama** (TE-EXTC).

workshop. The forty-plus members in attendance on both days were able to gain a deeper understanding of Power BI capabilities thanks to the interactive workshops and hands-on exercises. Thus, based on the good feedback from the participants, the workshop proved to be an overall success.



**Poster of the event**

The workshop commenced with introducing participants to the Power BI interface, data connections, and the basics of creating visualizations. The session delved into data modeling techniques too, emphasizing the importance of data preparation and transformation. Shaping and cleaning data for effective analysis and visualization was demonstrated through examples by the speakers.

The second day was led by **Abhinaya Danda** (TE-INFT) and **Piyush Tilokani** (TE-INFT) and they focused on creating an interactive dashboard by creating a full-fledged project. In this practical session, attendees were guided through the process of creating reports and dashboards using Power BI.

A comprehensive understanding of Power BI, covering both fundamental ideas and sophisticated methods were imparted during the



**(Top-Bottom, L-R): The hosts of the event, Kinjala Ahuja (TE-CMPN), Swati Dubey (SE-AIDS), Kareena Lachhani (SE-CMPN), and Vishwajeet Panaskar (SE-ECS), alomg with the speakers Ruchir Jain (TE-CMPN), Aditya Nama (TE-EXTC), Abhinaya Danda (TE-INFT) and Piyush Tilokani (TE-INFT)**

# CRACKING THE UNICORN CODE

A mythology often grows up around unicorns—start-ups with valuations of $1 billion or more—that burst onto the scene, with stories of bold action, "crazy" bets, quirky personalities, and luck. While these myths may make for great storytelling, underneath them lies a set of facts that helps to explain unicorns' success. Understanding these facts and how they can be applied to other enterprises is particularly important for CEOs of large businesses looking to build new revenue, bolster resiliency, and court venture capitalists (VCs).

To help incumbents launch new businesses, McKinsey had interviewed ten successful VCs and angel investors and analyzed 100 unicorns to distill what really matters in developing start-ups. This analysis revealed five things that help start-ups morph into unicorns.

Five Ts for finding unicorns

## 1. Teams: Do they have sufficient experience and networks?

A common mantra among VCs, particularly about early-stage funding, is "Invest in people, not in businesses." But what kinds of people and in what kind of teams? Our analysis yielded four facts

Mavericks are the exception. The vast majority of successful scale-ups (around 75 percent) were started by two or more people.

Diverse founding teams are best. Top founding teams bring complementary skill sets to the table. Their backgrounds include a mix of expertise in technology (around 40 percent of founders), natural science (around 25 percent), and business (around 25 percent).

University education still matters—a lot. A large majority of founders of the top 100 unicorns have completed an academic degree (more than 95 percent), and more than 70 percent have advanced degrees such as a master's, an MBA, or a PhD. Interestingly, where the degrees came from mattered less. While about 25 percent of founders got their degrees from top US schools such as Stanford, Harvard, Yale, Wharton, or MIT, the rest came from other institutions. With education come important networks. More than 70 percent of cofounders went to the same university prior to building their unicorn.

Track records and experience are essential. It is unlikely that founders will build a top 100 scale-up on their first attempt. More than 80 percent of founders gained work experience prior to building their successful venture, and more than half had founded start-ups before.

While these patterns broadly hold true globally, there are some regional differences. Founders of Asian scale-ups, for instance, commonly have less work experience prior to starting their venture. Top European scale-ups also have a significantly higher share of female founders (16 percent versus 12 percent globally).

## 2. Total addressable market (TAM): Is it big enough to be worth it?

When deciding whether to fund a new business, the VC investor wants to know if the investment can become big enough to be worth it. Assessing the potential comes down to two things:

Size matters. The biggest sectors have the greatest number of successful scale-ups. Three sectors with annual revenues greater than $5 trillion—technology, media, and telecommunications; industrials; and healthcare—account for almost a third of the top 100 unicorns. Playing in a large enough market, therefore, improves a venture's chances of hitting it big. Similarly, significant trends have an impact on TAM volumes and, in some cases, even open up a "blue ocean"—entirely new, large market spaces. One such trend is sustainability, in which governments and companies are expected to invest nearly $10 trillion per year for the next 30 years. With 11 investment areas, ranging from green transportation to decarbonization, we expect the climate economy to see the launch of hundreds of new unicorns (Exhibit 2).

Smaller markets or sectors can also be the homes of successful start-ups as long as the potential for market disruption is significant. While AI and big data, for example, are relatively small fields today, accounting for less than 5 percent of total value creation across all segments, they include 16 of the top 100 unicorns.

There's a clear market opportunity. A large enough market is table stakes. It is essential that the market also offers significant growth potential for new entrants. To determine whether a market is "crackable," VCs typically assess whether there is an opportunity for a product or service to take advantage of a market weakness. Strong fragmentation is one example of such a weakness: if a market has many players and no clear leaders, it is often easier for a new entrant to disrupt it and build up significant market share. A young market without dominant companies and with relatively low barriers to entry also can offer an attractive opportunity.

## 3. Timing: Too late, too early, or just right?

In comedy, they say timing is everything. That's equally true of investing in start-ups:

Leaders recognize trends first and benefit from early moves. Correctly identifying new trends and their impact early on allows first movers to enter uncontested spaces and build a strong position—which typically results in higher margins and faster growth. For this reason, ventures at the forefront of trends benefit from greater capital availability and more-attractive valuations. As first movers in the climate market, for example, sustainable brands and net-zero-focused products exhibit faster growth and significantly higher price premiums—for example, we expect a green premium for steel of $200 to $350 a metric ton by the middle of this decade.1 Furthermore, we see two to five times the uplift in valuation multiples for companies with a strong climate focus.

The start-up operates in a two-to-three-year window. VCs look for that "Goldilocks" spot where a business isn't so far ahead of the market that it will die before it has enough customers or so far behind that its market opportunity is lost to competitors. They look to invest in start-ups where the product or service not only works but also has early indicators of market interest. The expectation among VCs is that start-ups travel significantly along this innovation curve within two to three years. In line with this view, the maximum amount of capital that is generally raised supports a run rate of about two and a half years.

## 4. Technology: Does it work at scale?

VCs evaluate whether a business can go from selling and supporting a hundred products to a million without breaking. Technology is often at the heart of a company's ability to scale:

Software drives the scale. When assessing the potential for scale, VC investors typically want to confirm a company's ability to operate efficiently and stably with millions of customers and thousands of employees, often while growing at a rapid pace. For this reason, they favor software over hardware, which has complex logistics, maintenance, and development profiles. Software, in contrast, can scale almost instantaneously, if it is well built and supported.

This logic drove Enpal, a leading European green-tech player valued at more than $1 billion, for example, to invest in a fully online purchase model and develop an operating system and app that allows customers to manage solar panels, heat pumps, and other products all in one.2 Similarly, Infarm, the world's largest urban vertical-farming network, started with a strong focus on hardware but has shifted its focus to software.3

Tech foundations can support scale. Some VCs have dedicated technology teams to review and assess a start-up's tech profile to ensure it is scalable. They are on the lookout, for example, for high degrees of automation so costs don't escalate as revenues grow. Having a tech foundation that's ready to scale requires developing a modular tech stack built around microservices and APIs that create simple and well-defined interfaces to data, algorithms, and processes. In the same way, partnering with the right hyperscaler to take advantage of platform as a service (PaaS) and infrastructure as a service (IaaS) enables scale.

## 5. Traction: Is there a clear path to profit?

The start-up needs time to grow, but VCs want evidence that it's on the right track:

The business is uniquely positioned to solve a real need. Too often, founders start with an idea or a product and then try to find a market for it. This typically does not lead to success. Instead, successful ventures provide unique solutions (for example, intellectual property that's hard to replicate) that change an unacceptable status quo. While it is common for successful start-ups to develop completely new technologies, they can also develop a novel combination of existing technologies, market existing technologies with new ones, radically improve user experiences, or simply operate far more efficiently than competitors.

Revenues indicate traction in the market. VC investors expect revenues of new businesses to grow rapidly. One European VC leader expects new ventures to follow the 3-3-2- 2-2 pattern to demonstrate good traction—revenues should roughly triple each year in the first two years after founding and then double for at least three years after that (Exhibit 3). Our analysis broadly corroborates this rule of thumb: successful start-ups at least doubled their revenues every year for eight years. More important than total revenue is the type of revenue. VCs favor annual recurring revenues (ARR) over one-off sales and look for customers who buy more than one product and whether per-customer revenue increases over time.

The path to profit is clear. While it is typical for start-ups to show significant net losses in early years, a clear path to profit is essential. VC investors generally look at customer acquisition costs (CAC) and customer lifetime value (CLV) as key indicators. While the CAC are often steep for new businesses, trend lines should clearly show improvement. Historically, VC investors have considered a CLV:CAC ratio of three times at scale a good indicator of strong traction.

Understanding the intricacies of building a unicorn startup is crucial for incumbents venturing into new businesses. Unicorns, by their very definition, are rare and challenging to create. However, by grasping the essential success factors and aligning strategies with how venture capitalists think and operate, aspiring entrepreneurs can enhance their odds of hitting it big. This understanding becomes particularly relevant when examining the top 10 unicorn companies in India, each of which has navigated its unique journey to achieve extraordinary success. By dissecting the growth histories, valuation strategies, and founders' stories of these Indian unicorns, entrepreneurs can glean valuable insights into the patterns and approaches that contribute to building a successful startup in the Indian market.

## Top 10 Unicorn Companies In India



### 1. Paytm

Paytm is an app that provides commerce, cloud, and financial services. It was launched in 2010 by Vijay Shekhar Sharma, and One97 Communications was its parent company. It is based on the business model of users downloading the app, using UPI to transfer money, or scanning QR codes. Now, it offers features like movie ticket booking, EMI payments, etc. Currently, it is one of the most used digital wallets in the country. In 2017, Paytm became the first payment app in the country to surpass 100 million downloads.



### 2. Ola

Ola has recently joined the ranks of unicorn companies in 2019 India after receiving Rs. 1,725 crores from Softbank. The company's business model is getting a commission on ride booking and charging fees for add-on services. In 2010, Bhavish Aggarwal and Ankit Bhati founded Ola. The journey has been interesting for them. It all started with a taxi rental fleet business inspired by Bhavish Aggarwal's personal experiences with cab drivers. With time, Ola evolved into a platform that provided a convenient way to book a cab, gradually expanding its customer base. In 2017 it introduced its subsidiary- Ola Electric. Ola Electric is a two-wheeler manufacturer based in Bengaluru. It has witnessed a tremendous jump to 1549.64%.



### 3. Byju's

Byju's is a well-known ed-tech company among students. This learning startup was founded in 2011 by Byju Raveendran. This startup focuses on making the learning process enjoyable and engaging. It followed a freemium business model, providing free and premium services to students. It was ranked the 13th largest unicorn in terms of its global valuation. Byju Raveendran was tagged as India's youngest billionaire in the Forbes list of India's 100 richest people. In 2020, it reached the status of a decacorn. The ed-tech company has started a fundraising round for around Rs. 5,750 crores.



### 4. Flipkart

Sachin Bansal founded the first e-commerce company in India. In 2007, he established a private limited company to provide an online marketplace for Indian customers. The company earns revenue through fees based on commission, financial services, advertisement, logistics, and fulfilment services. Flipkart started its journey with bookselling. Later, it diversified to sell electronic products, air conditioners, lifestyle items, and e-books. The success story continues, with Walmart acquiring a 77% stake in the company.
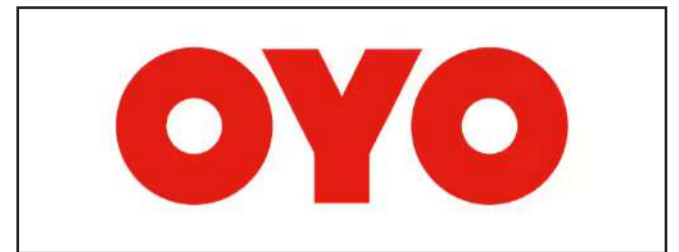


### 5. Zomato

Zomato was established in 2008 by Deepinder Goyal. Like all other startups, it has its share of ups and downs. The e-commerce platform operates in a B2B model. The main feature of this e-commerce platform is online food ordering and delivery. It allows users to view various restaurant menus and reviews and allows consumers to browse and order food directly through the app. Interestingly, it is one of the first unicorn companies in India to make its place in the stock market. Zomato's revenue has jumped to 75%.



### 6. Cred

Kunal Shah founded Cred FinTech in 2018. It follows the Peer-to-Peer (P2P) model. Kunal had a particular focus on supporting the taxpayers of India. So, this platform was created to give some relaxation to taxpayers. The platform offers easy credit card payments at an interest rate of 9%. The tagline is "Suraksha aur Bharosa dono". It highlights its commitment to ensuring secure transactions and building user trust. It has partnerships with over 2000 brands and tie-ups with over 34 banks.



### 7. Oyo Rooms

It was founded in 2012 by Ritesh Aggarwal. It runs on an aggregator business model. Over time, it follows a combination of aggregator and franchise business models. This has made it easy for travellers to find affordable accommodations. The multinational online travel agency provides various services, including breakfast options, holiday programs, and rewards. Oyo rooms have witnessed a 15-fold growth, with over 2.3 million bookings since 2016.



### 8. Razorpay

The founders of Razorpay are Harshil Mathur and Shashank Kumar, founded in 2014. The business model is based on providing online payment gateway services to businesses and charging a fee on every transaction. The main focus is simplifying payments and making them more accessible for Indian businesses. It collaborated with many institutions like NPCI and RBI for smooth payments.



### 9. Mamaearth

The company was formed in 2016 by Ghazal and Varun Alagh. They struggled to get a place in the top Indian startups. The products have been certified by Made Safe. Based on a direct-to-consumer approach model, they started their business with Rs. 90 lakhs. The unicorn hit Rs 920 crores in 2022.



### 10. Blinkit

It was founded by Saurabh Kumar in 2013 and was originally known as Grofers but was revamped to Blinkit in 2021. It is based on a surge price business model and is committed to delivering your daily grocery essentials within 10 minutes. In 2022, Zomato acquired this unicorn. Blinkit is operating in 28 cities. Just swipe the order, and Blinkit ensures your groceries are delivered to your door.

Source: How to build a unicorn: Lessons from venture capitalists and start-ups published by Mckinsey & Company & Inspiring stories of Top-Listed Unicorn companies in India published by Chegg

# EXTRACURRICULARS

# Defy Corruption, Embrace Patriotism

*~Joanna Sanju*

The VESLit Circle organized a literature event '**Say No to Corruption, Commit to Nation',** in collaboration with the Union Bank of India. This event was conducted on 13 October, 2023 at the Language Lab (CA3). The students showcased their skills through debates, poster making, drama, essay writing, and a modified quiz, fostering student engagement against corruption. Each competition was designed to tap into different talents and skills of the participants.



**Poster of the event**

The debate competition followed the rigorous format of Oxford style, consisting of three rounds - preliminary, semi-finals, and finals. The intensity of the competition fostered a challenging environment, pushing students to explore the depths of their knowledge and critical thinking skills. The event not only encouraged healthy competition but

also served as a platform for participants to broaden their perspectives on the theme. The first prize winners of the debate competition were **Venkat Nittala** (FE-ECS) and **Kamya Gupta** (FE-ECS) and the runners-up were **Riya Shivgan** (FE-AIDS) and **Archee Dara** (FE-AIDS)**.** The poster-making competition allowed participants to showcase their artistic prowess either through handmade or digital posters, emphasizing the theme of saying no to corruption. The absence of plagiarism ensured the authenticity of the entries, and the event witnessed an outpouring of creative energy, with participants delivering visually stunning works of art that conveyed powerful messages against corruption. For the poster making competition the first position was secured by **Tanvi Nirmal** (FE-AURO), second position by **Vedika Parab** (FE-AIDS) and third position by **Rutuja Bait** (FE-AURO).

With a time limit of 8 minutes and a maximum team size of four members, the drama event showcased the passion and skill sets of young participants in acting. The performances were not only captivating but also served as a medium to convey the event's central theme, providing a unique blend of entertainment and social awareness. Winners of the drama competition were **Faizan Shah** (FE-ECS), **Venkat Nittala**(FE-ECS), **Kamya Gupta** (FE-ECS), **Mayuri Joshi** (FE-ECS), and the runners up were **Yash Sarang** (BE-AIDS), **Kshitij Shidore** (BE-AIDS), **Vrushabh Karvade** (TE-EXTC), **Parth Suryavanshi** (BE-AIDS). The essay writing competition, with a maximum word limit of 1000 words, allowed participants

to express their perspectives on the theme in either English or Hindi. This segment of the event provided a platform for participants to articulate their thoughts, encouraging them to delve deeper into the nuances of corruption and its impact on the nation. For the essay writing competition the first position was secured by **Akshay Nambiar** (FE-AURO), second position by **Sujal Sahu** (SE-AIDS) and third position by **Pragnya Sahoo.**



**VESLit team along with UBI officials**

The modified quiz, featuring two rounds, engaged participants in a challenging intellectual exercise. Teams, consisting of two individuals each, competed in a battle of wits, testing their knowledge on vigilance and anti-corruption measures. This segment added an element of excitement and fostered healthy competition among the participants. The winners of the modified quiz were **Hrishikesh Patil** and **Harsh Rane** (BE-CMPN).

The program successfully engaged students in diverse activities, effectively raising awareness and instilling a commitment to combat corruption through intellectual and creative avenues.

# Spectacular Indoor Sphurti

*~Riya Varyani*

The **Senior indoor Sphurti** was organized from 3rd October to 6th October 2023 and **Junior Indoor Sphurti** was held on 7th October 2023.

Junior Sphurti, tailored for first-year students, and Senior Sphurti, catering to second, third, and fourth-year students, were vibrant events pulsating with energy and enthusiasm. The array of engaging games, ranging from carrom and chess to table tennis and darts provided ample opportunities for participants to showcase their skills and competitive spirit. Additionally, the inclusion of Futsal for girls and Box Cricket for boys injected an extra dose of excitement, with gripping matches unfolding on the field. The atmosphere buzzed with excitement as students eagerly participated in these thrilling contests, fostering camaraderie and sportsmanship among peers.

The winners of Carrom, Chess, Table Tennis , Table Tennis Double, Darts, and Badminton in the boys category are SE-ECS, BE-AIDS, BE-INST, BE-CMPN, TE-INST, SE-CMPN and the Runner ups are BE-ETRX, TE-CMPN, SE-EXTC, SE-CMPM, TE-CMPN, and BE-EXTC respectively. And in the girls category the winners of Carrom, Chess, Table Tennis, Table Tennis Doubles, Darts, Badminton are SE-AIDS, TE-EXTC, SE-AIDS, SE-AIDS, SE-ECS, SE-CMPN and Runner ups are BE- AIDS,

TE-CMPN, TE-INFT, BE-CMPN, SE-INFT, and SE-CMPN respectively.

Carrom Mixed Doubles winner is SE-AIDS and runner-up is TE-EXTC. Futsal winners and runner-ups in the girls category are SE-EXTC and SE-ECS respectively. Box Cricket Winners and runner ups in the boys category are TE-INST and SE-INFT respectively.

The MVP Players for Chess, Carrom Table Tennis, Darts, Badminton and Box Cricket in the boys category are **Govind Tiwari** (BE-CMPN), **Darshan Kakad** (SE-ECS), **Anuj Bagad** (SE-CMPN), Yash Shikare (TE-INST), **Vivek Venkatachalam** (SE-CMPN) and **Vivek Gupta** (SE-INFT) respectively

The MVP player for Chess, Carrom Table Tennis, Darts, Badminton and Futsal in the girls category are, **Anousha Menon** (TE-INFT), **Sanskruti Nawandre** (SE-AIDS), Ridima Sahasrabudhe (SE-AIDS), **Ananya Dubey** (SE-ECS), **Gazal Keshwani** (SE-CMPN) and **Shravani Khanvilkar** (SE-EXTC) respectively.

Junior Indoor Sphurti Winners in the boys category for the games Carrom, Chess, Table Tennis, Darts, Table Tennis Doubles are MCA, FE-AIDS, FE-AIDS, FE-CMPN and FE-CMPN. And the Runner ups are FE-INFT, FE-INFT, FE-ECS, FE-ECS, and FE-INFT respectively.



**(Top-Bottom, L-R): Winners of Table tennis (Girls doubles), Winners of Futsal(Girls), Winners of Chess (Girls), Winners of Chess (Boys), Winner & Runner-Up(Badminton), and Runner-Ups of Box-Cricket(Boys)**

(Top-Bottom, L-R): Junior Sphurti Chess Winners(Girls), Junior Sphurti Chess Winners(Boys), Junior Sphurti Carrom Winners (girls), and Junior Sphurti Carrom Winners (boys)



(Top-Bottom, L-R): Junior Sphurti Table Tennis Winners (girls), Junior Sphurti Table Tennis Winners(Boys), Junior Sphurti Darts Winners(girls) and Junior Sphurti Darts Winners(Boys)

Junior Indoor Sphurti Winners in the girls category for the games Carrom, Chess, Table Tennis, Darts, Table Tennis Doubles are FE-EXTC, FE-AURO, FE-AURO, FE-ECS, FE-ECS. And the Runner ups are FE-INFT, MCA, FE-EXTC, FE-AIDS and FE-AURO respectively. The winners and runner ups for Carrom Mixed Doubles are FE-AIDS and FE-AURO respectively.

MVPs of the Junior Indoor Sphurti for the games Chess, Carrom, Table Tennis and Darts in the girls category are **Sayalee Mahangaonkar** (FE-AURO), **Vishakha Kadam** (FE-EXTC), **Tejasvini Bachhav** (FE-AURO) and **Deet Kaur Barman** (FE-ECS) respectively. In the boys category the MVPs for the games Chess, Carrom, Table Tennis and Darts are **Harshal Bhave** (FE-AIDS), **Alvi Nabeel, Milap Mahaprata** (FE-AIDS) and **Achvant Belvani** (FE-CMPN) respectively.

# Improving Soft Skills

*~Srushti Chopade*

The **Personal and Professional Achievement Program (P&PA)** is a personality development program conducted by VESLang circle commenced from 13th September 2023 to 21st October 2023.

It had twelve planned sessions and was a six week long program conducted for First and Second year students only. The timing for the online sessions was 8:30 pm taking into consideration the college hours and travel time of the participants. The sessions were conducted twice a week and covered various domains like group discussions, interviews, public speaking, presentation etc.

Each session began with an explanation of a new topic by a senior member of the council through examples and presentations. It was further followed by a fun activity related to the topic which was conducted by the junior members of the council. The fun activity made the session interactive for the participants.

Throughout the session, participants learned different practical skills such as resume writing, presentation techniques, and job interview strategies. During the offline sessions, they were engaged in group discussions and mock interviews

of the participants were conducted by the council members.



**Alumni joining in VESLang workshop in 2023**

Every week an alumni session was held after the workshop. Successful alumni students of VESIT like **Mr**. **Vaidyanathan Natarajan** (Batch of 2023, Department of Instrumentation Engineering), **Mr. Pratik Chainani** (Batch of 2022, Department of Computer Engineering), **Mr. Aadi Fernandes** (Batch of 2021, Department of Electronics Engineering), **Mr. Mihir Pamnani** (Batch of 2023, Department of Computer Engineering), **Ms**. **Nidhi Nair** (Batch of 2023, Department of

Instrumentation Engineering), Sreekesh Iyer (Batch of 2023, Department of Information Technology) and **Ms. Sneha Karthik** (Batch of 2023, Department of Computer Engineering) shared their experiences, which helped the participants to learn more about different professional ethics.



**Participants performing the group discussion activity**

In conclusion, the P&PA program in 2023-24 was a success. Feedback from participants was positive, highlighting personal and professional growth. The friendly approach of the P&PA journey made it a valuable experience for all participants, equipping them with practical skills for their professional journeys.

# Quiz on Samvidhan Diwas

*~Brijesh Sharma*

Samvidhan Divas, also known as Constitution Day is celebrated in India on 26th November 2023 annually to honour the adoption of the Constitution of India. This day holds significant historical importance as it marks the culmination of the efforts of the Constituent Assembly in framing the guiding document for the world's largest democracy. On Samvidhan Divas, various events and programs are organized across the country. Educational institutions play a crucial role in spreading awareness about the Constitution. Students often participate in activities that enhance their understanding of the democratic principles enshrined in the Constitution.

On 27th November 2023, in collaboration

with the MCA Department and with the help of **Dr. Ramesh Solanki** ( Assistant Professor, Department of Master of Computer Applications), the library organized a National Quiz and more than 100 participants took part in that. **Dr. Meenakshi Tyagi** (Library Incharge, VESIT) was the coordinator for the quiz and convened by VESIT Library Committee Members under the patronage of **Dr. J.M. Nair** (Principal, VESIT) and **Dr.Vijayalakshmi M.** (Vice Principal, VESIT).

The quiz was free of cost for all the staff members of the college, students and professionals working in the domain. E-certificates were given to all the participants who have scored 40% and above.



(L-R): Coordinators of the event, Dr. Ramesh Solanki ( Assistant Professor, Department of Master of Computer Applications) and Dr. Meenakshi Tyagi (Library Incharge, VESIT) and Dr. J.M. Nair (Principal, VESIT) and Dr.Vijayalakshmi M. (Vice Principal, VESIT)

# Vibrant Celebration of Vachan Prerna Diwas

*~Brijesh Sharma*

**V**achan **Prerna Diwas**, also known as National Reading Day, celebrated on 15th October 2023 is an annual celebration aimed at promoting reading and encouraging a love for books and literature. As VESIT always takes the initiative to develop the student's personality, Vachan Prerna Diwas was organized on 16th October. The library in association with **Internal Quality Assurance Cell (IQAC)** and **Institution's Innovation Council (IIC)** organized a competition for the creation of reels or short videos about library services at VESIT on October 15, 2023. Responses from staff members, students, and anybody else connected to the library are encouraged to enter the competition.

Through the library software KOHA, the library announced the Best User of the Library, and for the first time Library has given the Best User from the faculty, **Dr.Nilima Warke** (Associate Professor, Department of Instrumentation Engineering) and Non-Teaching Staff, **Mr. Perumal Balasubramanian.**


**Poster of the event**

The winners of the reels making competition were **Sukanya Pingle** (TE-EXTC), and **Sneha Bhalerao** (TE-EXTC). The event has surely helped all the participants to encourage and motivate them to read technical as well as non-technical books. In addition to this, the event has enabled the students to boost up their knowledge apart from curriculum.


**Winners receiving the certificates**

# MY SOCIETY, MY RESPONSIBILITY

# Fundraising paired with Fun

*~Anish Padye*

**F**rom the 3rd to 6th October 2023 , **SoRT VESIT** conducted Spectral '23, a fundraiser event. This event was a collaborative effort involving the **VESIT Music Council** and **VESLit Circle** and SoRT Council of our college. It was a three day covering various games, activities and an Open Talent Aid on the last day. Notably, this year's event was exclusively dedicated to raising funds for the Khushiyan Foundation, Thane.

The event commenced on October 3, 2023, with members of the SoRT council visiting the **Khushiyan Foundation,** accompanied by few members from the Music Council. Khushiyan Foundation is located in Thane and it was great fun to be a part of the noble cause. It was really fun to interact with senior citizens and children there, who had a smile on their faces no matter what the situation was. SoRT and VMC also conducted some fun activities and a singing session, especially for the children. The subsequent day, October 4, 2023, featured a range of activities, including mini-games, a real-life 'Among Us' game, and a quiz competition organized by the VESLit Circle. Among Us was a hit among students, as it was conducted for the first time in VESIT. The participants had to perform various tasks to win in the game. The management by SoRT Council for the whole game was noteworthy and everybody had fun.

The following day offered participants the opportunity to engage in three theme-based Escape Rooms, providing a blend of excitement and entertainment. The themes for the Escape Room were Harry Potter, Annabelle and Stranger Things. The Escape Rooms were held on 5th floor and setting them up in just 2 hours was the real task The event culminated on October 6, 2023, with a Talent Aid (open-stage event), where individuals could showcase their talents. It was a nice evening for all the VESITians. They performed dance, singing and also some monologues for the evening. What's special about an Open Mic is that anybody can come and showcase their skills without the fear of being judged or eliminated. Additionally, a real-life 'Among Us' game was conducted exclusively for the first-year students in the next week due to overwhelming response on the first day.


**Inauguration of the Spectral '23**

Throughout the event, there was a basic participation fee for each activity, which was channeled as charitable donations to support the Khushiyan Foundation. The primary objective of the event was to raise awareness, foster empathy, and generate funds to aid underprivileged children and senior citizens. SoRT VESIT **collected around**

**Rs. 70,300** in the total four days for donating to the foundation. It was a heartful event organized by Music Council and SoRT Council along with VESLit which had a mix of noble work paired with fun and joy, which also showed the collective impact we can have when we come together with a shared purpose.


**VESIT Music Council making the Spectral event extravagant**


**Stalls arranged by the SoRT-VESIT members for the Spectral '23**

# FEATURED

**Students placed in dream companies shared invaluable insights, shedding light on the rigorous yet rewarding placement process. Their interviews offer a glimpse into the challenges faced and strategies employed, inspiring future aspirants.**



**Sarvesh Patil (BE-INFT) placed at Nomura**

**Total number of students selected: 3**

**Branches Eligible:** CMPN, INFT, ETRX, EXTC, AIDS, MCA

**Eligibility Criteria**: No such criteria was mentioned

**Explain in detail the hiring process of the company:**
**Round 0** -
Team Formation
We were required to form two-person teams (inter-class is permitted) and register on the company's website with a team name. So, form the team wisely, as it will have a significant impact later in the process.

**Round 1** - Executive Summary Submission
The Executive Summary submission round was the first and one of the most difficult rounds of the competition. In this round, only 16 teams were chosen from a pool of over 50. Many students did not apply because the problem statement was unusual and difficult to comprehend.

**Round 2** - Executive Summary Presentation The round 1 shortlisted students were asked to present their solutions in front of the Nomura Panel at the college itself. The presentation lasted about 15 minutes, followed by a Q&A session. You must have a complete understanding of your solution before presenting. Keep no loose ends because you may be grilled on them. Consider all of the possible outcomes when preparing your presentations. This round will be entirely technical, with questions such as "What tech stack will you use?" and "Why have you chosen this tech stack?" If your solution lags behind, they will point it out, and you will have to persuade them that you will include it in the solution. Additionally, try to persuade them that you will be able to complete the entire solution during the hackathon. They will ask you about your technical experience, so make sure you tell them about all of your internships and projects in detail, and if you have any previous hackathon experience, that would be a plus. Eight teams were chosen for the final round.

**Round 3** - Hackathon. The actual Hackathon has to be the best thing about KakushIN. Before participating in the Hackathon, you must provide your tech stack, which includes what tools, libraries, and API languages you will be using on the day of the hackathon. You visit their office once before the hackathon to ensure that everything is properly configured on your system. You will connect to their AWS machines via RDP (Remote Desktop). Inform them if anything is missing. Nomura picked us up from college and dropped us off at our homes. KakushIN is a hackathon that lasts two days. You code for 10 hours on day one, and only 30 minutes on day two to set up your system to demo to the panelists.

**What piece of advice would you like to give to future aspirants aiming for this company?**

**Things to keep in mind:**
Github is blocked, Drive is blocked, and URL tracking is active. Do not copy codes from websites; the phone can only be used for calling; Stack Overflow is permitted; official documentation is permitted; and ChatGPT is prohibited. Git is available for collaboration, and your Git repositories have been deployed on AWS.
We have mentors visiting us on day one to check on our progress and plan. Volunteers are constantly present in the room. You will be working in a lab rather than in open space. The first day's schedule is from 9:30 a.m. to 7:30 p.m. Then you'll be driven home, and the next day's pickup is scheduled for early morning, as your reporting time is 8 a.m.
On day 2, you code for 30 minutes and prepare your systems for the demo. The demo presentation must be completed in 10 minutes. You must demonstrate whatever you have created. There will be some Q&A. Finally, the judging is completed. Then you have the results. First Prize: A MacBook Air, Second Prize: an iPad Mini, Third Prize: GoPro. Following the results, they informed us that approximately 15 to 20 PPOs were offered, and the selected students were notified by the college two days later on July 14th, and I was one of them. Despite the fact that my team did not place in the top three, I received a job offer. Three students were selected from our college: two from CMPN and one from INFT. If you are good at development and soft skills, this is the best opportunity to get into a Dream Company.



**Divisha Gupta (BE-INFT) placed at Interactive Brokers**

**Total number of students selected**: 1

**Branches Eligible:** INFT, CS, AIDS

**Eligibility Criteria:**
- No current backlogs
- Aggregate CGPI till current semester above 8.3
- Minimum 87% in 12th / Diploma
- Minimum 90% in 10th

**Job Description:** Junior Software Engineer

**Explain in detail the hiring process for the company:**
The registration form was released on 18th July and the deadline for the same was 19th July 2023
PPT and test on 24th July 2023
Predictive Index round: 24th July 2023
Interview Rounds: 25th July - 27th July 2023
The PPT round was conducted in the auditorium and the test was conducted just after that in the labs. The test was not proctored by Mettl but the placement coordinators present in the labs supervised the process. Even company officials were visiting labs and candidates

**Predictive Index (PI) round:**
The Predictive Index or PI round was held in the evening on the day of the test. The deadline for this round was midnight on the same day. A Predictive Index is a psychometric evaluation of a person's personality in a work environment, and how compatible the candidate will be with the company's culture.
2 questions are asked and you are given a list of qualities that the candidate has to choose from to respond to the question. Be formal and professional, choosing qualities that are workplace-related.
All 6 candidates were qualified for this round.

PS: If you get rejected in this round, you will never be able to apply for IBKR

**Technical Interview 1:**
Both interview rounds were held on the Codility platform. Questions asked were more or less focused on Java and SQL.
He then gave me a table and a problem and asked me to write an SQL query for that. The query was of easy level which could be easily solved using aggregate functions.
Then the interviewer asked me some puzzles/ aptitude questions. Easily solvable if one has done enough quantitative aptitude. Then the interviewer asked if I had any questions for him. Only 3 candidates qualified for technical interview 2.

**Technical Interview 2:**
The interview was not completely technical but a mix of technical plus general. My approach to questions was studied and discussed.
It started on a lighter note and the interviewer asked how my day went. Then the questions started.
The interviewer then gave me some puzzles and asked my thinking to solve the problems. 2 questions were of quantitative aptitude type (profit, loss, and discounts) and 2 were puzzles to assess my cognitive ability.
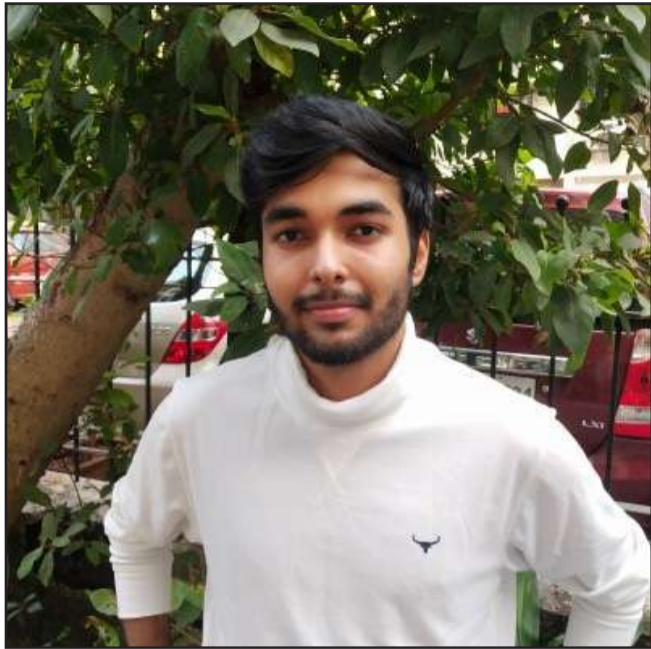The interviewer was very sweet and supportive,

nudging me in the right direction. It is important to always think out loud. Doesn't matter if you think it is wrong, let them know what you are thinking.

This was the last round and only 1 candidate was hired for the role of Junior Software Engineer.

**What piece of advice would you like to give to future aspirants aiming for this company?**

- Highlight any extracurricular activity you've taken part in or anything worth mentioning when asked.

- Smile and don't lose your calm when you don't know the answer to a question. Politely say so but assure them that you'll explore the topic.
- Be honest. Do not bluff. Interviewers are very experienced and can see past your bluffs.
- Ask questions at the end of the interview.

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**Chaitanya Sondur (BE-CMPN) placed at Forcepoint**

**Total number of students selected:** 60 students were eligible for the process

**Branches Eligible:** CMPN, INFT, AI&DS

**Eligibility Criteria:**
- 85% and above in 10th
- 80% and above in 12th
- Aggregate CGPA of 8 overall.
- No live KTs.

**Explain in detail the hiring process of the company:**
It all began on the evening of 19th with a pre-placement talk session. We got to know about the company, the office location and the values of the company. That was followed by an HR Aptitude and coding test. On the next day, shortlisted candidates were interviewed for 3 rounds including two technical interviews.

**Round 1 - Aptitude and coding test:**
The test was conducted on Mettl. There were five sections - Logical Reasoning, Verbal Ability, Quantitative Analysis, Data Analytics and Graph Analysis, Technical Skills and one coding question. This test had a total of 36 questions and each section had its time limit i.e. each section needed to be completed within the given timeline. Camera, Mic and Screen Share would be switched on throughout the test. The questions asked were very basic aptitude questions related to work-time, time-speed-distance, profit-loss, etc.

**Round 2 - First Technical Interview:**
The interviews began on the morning of the 20th and lasted for around 30 minutes. They asked me to introduce myself and then went on to ask about my projects, resume and the tech stack I used. To begin with, they asked me questions about Java, OOPs, particularly generics, singleton classes and exception handling. Technical questions on core computer science topics like networking, operating systems, and DBMS were also asked. Since this is a cybersecurity-based company, I expected them to ask about networking. So it's necessary to research the company beforehand to get an idea of what might be coming your way. Finally, I was given a problem to solve. I had to share my screen and use any online compiler/code editor to solve it. The question was on arrays and I was able to solve it in a brute-force approach. Since I was running short of time, the interviewer asked me to verbally discuss the optimized solution. In the end, I was asked about the time complexity.

**Round 3 - Second technical interview:**
This interview lasted shorter than the previous one. The beginning was the same - an introduction about myself, going through my resume and hobbies. The interviewer was keen on my internship and asked about it in detail. Make sure you know everything that you mention in your resume. Don't bluff! You'll be caught.

**Round 4 - HR Round:**
This round is one of the easiest to crack. You have to be good at communication and talk about relevant things. The interviewer asked about my family background, place of residence and how I would travel to the office location. Then she asked me about my hobbies. End the interview by always asking a question related to the company which would show your excitement about being a part of them.

**What piece of advice would you like to give to future aspirants aiming for this company?**

- Be honest in your answers.
- Try to have a mock interview.
- Research about the company a day before the interview.
- Never get demotivated by a company's rejection.
- Accept your mistakes and start preparing for the next interview.

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**Diya Shah (BE-INFT) placed at Barclays**

**Total number of students selected:** 5

**Branches Eligible:** CMPN and IT

**Eligibility Criteria:** CS & IT students from Third year(TE), with ≥ 60% score across classes X, XII and engineering semesters and no Live KTs

**Explain in detail the hiring process for the company.**
Process includes 2 Rounds which were:

**Round 1: Online Test(Technical Aptitude + Coding)**

**Round 2: Technical Interview + HR**
Round 1(3rd December 2022) Online Test:
This test consisted of Technical Aptitude and Coding Questions.
Section A: Comprising 28 MCQ questions notably on Java, C, C++, OOPs, SQL, and DBMS with emphasis on output-based questions on Java and C++, few questions. Section B: Consisted of 2 coding questions of 20 and 50 marks.

Round 2(8th December 2022) Technical Round + HR:
The interview took place on MS Teams and lasted for approximately 22 minutes. Conducted by a Vice President at Barclays, the interview got off to a delayed start due to his late arrival to the virtual meeting. The focus of the interview centered mainly around my resume, with an emphasis on my projects. The VP began by delving into the projects I had worked on, probing the security aspects of each. This allowed him to gauge the depth of my understanding of fundamental concepts.
He then proceeded to inquire about the various tools and technologies listed on my resume. Following this, he shifted the conversation towards the challenges I encountered while mastering these languages and technologies. Notably, I took the lead in steering the interview, demonstrating my ability to guide the conversation.
When asked about a particularly challenging concept, I highlighted the AVL tree, to which he inquired if I had become comfortable with it. My affirmative response prompted him to delve further into the topic, asking me to elucidate the logic behind identifying leaf nodes in the tree. Utilizing pen and paper, I visually explained the logic, effectively conveying my understanding.
Transitioning from technical aspects, the interview veered towards Barclays' core values, known as RISES. Drawing from my prior research and discussions with individuals who had previously interviewed with the company, I showcased my familiarity with these values.
As the interview drew to a close, the VP invited my questions. Seizing the opportunity, I inquired about insights he might offer to a fresh graduate like myself. In a gracious manner, he shared valuable insights gleaned from his years of experience.
Overall, the interview was a comprehensive exploration of my resume, technical knowledge, alignment with Barclays' values, and a moment of mentorship from a seasoned professional.

**Shubham Gupta (BE-CMPN) placed at Dolat Capital**

**Total number of students selected:** 2

**Branches Eligible:** INFT, CMPN, AIDS

**Eligibility Criteria:** Current graduation Aggregate CGPA 7 & above, 65% and above in 10th,12th & diploma, No live ATKT.

**Job Description:** Software Developer

**Explain in detail the hiring process for the company.**

**Round 1( Coding Round) :**
Programming test conducted on a platform called Imocha. It consists of two sections each having 2 data structures and algorithms problems. Each section has a time limit of 30 minutes. Overall 4 DSA questions have to be answered in 1 hour. The Difficulty level of the questions was easy to moderate level. Questions were based on standard data structures like array, queue, set, etc. Only C++ programming language was allowed.

**Round 2 (Technical Interview):**
After coding round 11 students were shortlisted for Technical Interview. It was scheduled offline at Company's Andheri Office. Interview started with a panel of 2 members and later a 3rd member joined them. They asked me to introduce myself and rate myself in DSA and C++.  All codes and snippets have to be written down on paper. They asked me on following topics :
Pointers (Double Pointers, Smart Pointers) Overloading vs Overriding, Dynamic Memory Allocation, Constructor, OOPs, Virtual keyword (Diamond problem in C++), Singleton Class, Abstraction and STL concepts etc.
After C++ questions they started with DSA questions. It consists of standard questions on Linked List, Array, Strings. Questions like implementing push_back function and interval working of HashMap were also discussed. At the end a question on graph data structure was also asked. This interview lasted about more than 2 hours. I was asked to optimize my solutions for a few problems. All interviewers were friendly and they were providing me with hints on tough problems.

**Round 3 (HR Interview) :**
This interview lasted much shorter than the previous. The beginning was similar - an introduction. What do you know about Dolat Capital? About my family background, Where do you stay? Do you have any plans for masters? It was kind of a casual conversation. But you have to be decent at communication. At the end of the interview, They asked me Do you have any Questions? Try to ask a few relevant questions with the interviewer.

**What piece of advice would you like to give to future aspirants aiming for this company?**

- Practice standard DSA questions on coding platforms like leetcode, geeks for geeks etc
- Research about company before the drive
- Try not to bluff
- Try to have few mock interviews

## Brian Chesky

*If we tried to think of a good idea, we wouldn't have been able to think of a good idea. You just have to find the solution for a problem in your own life.*

# VESIT DIARIES

Mayuresh Sarpotdar (Batch of 2006, Department of Computer Engineering) an alumnus of VESIT and currently serving as the Executive Director at Morgan Stanley, shares valuable insights into his career journey.

**What motivated you to choose your alma mater, and how did your journey from being a student there lead you to your current role at Morgan Stanley?**

I took admission into VESIT as a Second year direct diploma student. VJTI and VESIT were my 2 top choices and I was very Happy to have gotten into VESIT Comps.
Diploma curriculum allowed us to have significant practical exposure which I continued to build upon in VESIT. How I made it to Morgan Stanley, I think there were many aspects including being Hands on, Coding Skills, Knowledge of Operating systems and Databases and Computer Architecture (Theory part as well) and ofcourse Luck.

**Reflecting on your college days, could you share a memorable moment or experience from your time there?**

I would like to share 2 quotes I had heard from Nagananda Sir that have remained with me and have made considerable impact,
When going gets tough, Think of an Aeroplane , It takes off Against the Wind , not With it.
Never tell anyone you are Honest, You are Supposed To Be.

**Can you recount a pivotal moment or an interesting anecdote from your early career that significantly influenced your professional path, especially in the context of your role at Morgan Stanley?**

I was fortunate enough to work with some of the experts in the Industry in Databases and Java. Back then my team had only myself and my manager who was a super Java Expert on the floor. Knowledge of How a system in Architected and how to develop large scale, Distributed , Fault tolerant and Resilient system was something I learnt on the Job and that experience which I got in initial years still continues to help as basics never change :) .

**In your role at Morgan Stanley, what's the key to delivering successful solutions in your domain, and have you ever encountered challenges that**

made you wish you could simply say, "It's magic"?

The good or bad part of Computers is that there is never any Magic. Everything is explainable and repeatable and hence it's important to dive deep and get to the root cause. Key to delivering a solution is to listen to everyone but do what you think is right and fail fast. Have a healthy conversation with people on approaches and why A vs B vs C approach is better. Such discussions are helpful to everyone.

**After graduating, what steps did you take to carve out your career path, eventually leading to your current position at Morgan Stanley?**

I was lucky enough to get new roles every few years which continued to add up to my skills. Some of the advice that has helped me and I continue to build upon it is to drive your own career and to ask for opportunities when you think you can make a difference.

**Could you elaborate on your role at Morgan Stanley? What are the day-to-day responsibilities and challenges you face in your position?**

Presently I am lead for a specific team working on Corporate Action Processing. My main responsibility is to help my team succeed by giving them whatever required.
Challenges tend to be solving mystery about certain system behaviour in certain conditions and how to change it to desired one without causing unintended impact.

**Is it necessary to have a fool-proof plan for your career from the beginning, or did you find flexibility and adaptability more crucial in navigating your professional journey?**

Always good to have a plan so you know at a high level where you are going. However being Flexible and Adaptable is important to sustain and succeed. There is always an element of Luck which one cant underestimate and control.

**Given your experience, what technical skills and soft skills would you recommend for budding engineers preparing for the corporate world, especially in finance and technology?**

Please be very thorough with Basics , Understand how data structures work, which to use when,



Mr. Mayuresh Sarpotdar (Batch of 2006, Department of Computer Engineering)

their complexities, Computer architecture and Operating systems. What's covered in the syllabus is more than enough. Very important to do your labs seriously and by yourself :) . Multi Threading is a given thing in Industry and its critical to know how to write thread safe yet performance efficient code right at the college level itself and it's not at all difficult.

**Outside of your professional life, what aspects of your personal life or hobbies do you prioritize in your free time?**

I am a big proponent of Work Life Balance. Work is part of my life, it's not the entire Life. I travel extensively with Trips to somewhere nearly every weekend. Apart from that I am quite a foodie and like to play Racquet sports.

**As we conclude, considering your experiences, what legacy or advice would you like to impart to future generations, particularly those at your alma mater, and any parting words filled with insight and perhaps a touch of humor?**

1. Genuine connections you will make in College will last a lifetime :) .
2. Appreciating the power of Compounding, 8th Wonder of the World , it will start its rewards after 15-20 years but it's important to not to disturb it until then.

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Arise! Awake! And do not stop until
your goal is achieved