



- PREFACE -

We live in the age of AI and VR, when advanced tech that makes lives easier is commonplace, and new breakthroughs emerge at a blink-and-you'll-miss-it pace. In the midst of this sea of innovations, it is easy to lose sight of the journey that computing has undertaken to get to where it is today. Before the AI craze, we had mainframe computing, the PC era, the dot-com boom, mobile computing, and the cloud, all of which enabled their successors to sweep the globe. Contrary to popular belief, pieces of technology that were used extensively in the past have not died out: in fact, many of them have experienced a revival fueled by nostalgia and recognition of their enduring utility.

This issue contains a wide variety of articles and reports - in the Department Buzz section, we recap important events that occurred this year, including informative workshops, the CODE.INIT() hackathon, a revamp of the official CSED Minerva and SSL Athena websites and more. There's also recaps of FOSSMeet'25 that united enthusiasts of Free and Open Source Software, CSED Farewell that celebrated the batch of 2021, and the vibrant CSE Onam celebration.

We are also honoured to present interviews with three inspiring alumni from our department in the Success Stories section - Jayafar Moidu, Kartik Singhal, Karun Thankachan - where they share their valuable experience as well as thoughtful advice for students.

We hope this issue sparks your interest in retrotech while highlighting the spirit of the CSE department. For feedback, contributions, or queries, please reach out to us at csea@nitc.ac.in. The Threads team is proud to present this edition and we look forward to hearing from you.

Vaishnavi Pai and Sridevi Shankar,
Chief Editors, Threads



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DEPARTMENT BUZZ

CSEA Inductions

On December 27th, 28th, and 29th of 2024, the Computer Science and Engineering Association (CSEA) conducted its induction process for the B.Tech 2023 admission batch. The induction process aimed to assess the technical skills, creativity, and overall suitability of applicants while fostering a collaborative environment. Interested students applied under various categories including Content Writing, Design, Competitive Programming (CP), Web Development, and Event Management.

The induction process commenced with a Competitive Programming (CP) contest held on December 27th. This was followed by interactive interviews and domain-specific tasks conducted at the Network Systems Lab (NSL) on December 28th and 29th. The evaluation process focused on assessing applicants' domain knowledge, problem-solving abilities, creativity, and enthusiasm to contribute to CSEA.

In conclusion, a total of 15 students were inducted from the B.Tech 2023 admission batch. The following students were inducted:

- Aadil Krishna
- Aswin C
- M Rithvik Reddy
- Muhammed Ismayil
- Nadeem M Siyam
- Nandini M Prakash
- Neha Suresh
- Nitha Shifana
- Nithin R
- Richie James

- Shazil Mohammed KP
- Sahil M
- Smera Renjithlal
- Tarun Pradeep Nambiar
- Visruth Mohandhas

CSEA proudly welcomes its new inductees and looks forward to their valuable contributions.



Workshop Series

As a precursor to the upcoming annual hackathon Code.Init(), the CSEA organized a technical workshop series on January 18th and 19th, 2025 at SSL. These sessions were designed to introduce students to the fundamental building blocks of modern development, providing a necessary baseline for those looking to participate in the hackathon.

By focusing on core concepts across four key domains - frontend, backend, git and LLMs/RAG, the series helped participants familiarize themselves with essential tools and frameworks. The workshop series saw a high level of engagement with over 150 registrations.

The curriculum was delivered by senior students from the B21 batch. The first day opened with Mohammed Ameen's session on Git and GitHub, which covered the basics of version control and the setup of Python virtual environments. This was followed by an introductory AI workshop led by Mohammad Saad, who provided a high-level overview of Retrieval-Augmented Generation (RAG) and the concept of AI Agents.

The second day focused on the basics of full-stack development, starting with Aritro Ghosh on frontend fundamentals. The session introduced students to the design-to-code workflow, covering Figma prototyping and the basic syntax of ReactJS, Tailwind CSS, and Next.js. To conclude the series, Diljith Dileep led a backend workshop that demonstrated the initial steps of using Flask, the importance of frontend-backend decoupling, and the general process of deploying a project.



Code.INIT()

The highly anticipated 2025 edition of Code.Init() was held from January 24th to 26th. The 36 hour hackathon was organized by CSEA and was officially inaugurated by Prof. Madhu Kumar, who welcomed over 150 participants across all branches and years of study (grouped into 46 teams). This year's turnout was particularly notable, with more than half of the teams successfully navigating the grueling timeline to deliver a final submission.

The competition featured diverse problem statements ranging from high-level AI systems like sign language recognition and NLP-based interview assistants to low-level systems tasks such as building disk-formatting tools and Docker-based sandboxes. Teams also tackled real-time streaming platforms and interactive campus event managers, while the B24 batch showcased their web development skills through blog and e-commerce platforms.

To keep everyone going through the 36-hour hackathon, the organizers kept the pizza coming. When the coding got too intense, breaks were taken for some fun, including a meme competition that turned out to be the crowd favorite. A "deranged gentleman" took the top spot for his entry and was awarded a cake from Sugar Sisters as his prize.

The event wrapped up with a closing ceremony on 28th, where the hard work of the weekend was finally recognized. Cash prizes of ₹5,000, ₹3,000, and ₹2,000 were awarded to the top-performing teams, including a dedicated Freshers Prize for the B24 batch.

Details of the winners are as follows:

- First prize: Penguins - Mohammed Rehan Tadpatri, Harshan J, Akhil T.
- Second prize: IronFist - Elias Joby, Puneeth D. Shetty, Harshvardhan J.
- Third prize: BOOTICODES - Devadath A Kartha, Adidev J J, Mohammed Omar, Rohith S.
- Third prize (joint): Al-maida - Angelia Aju Mathai, Milan V Raj.
- Freshers prize: Binary Boys - Ibinu Jaleel, Richu Thomas Shine, Shalin Varghese, Jiss Janex.

Ultimately, Code.Init() 2025 was a fantastic learning opportunity and a true test of grit for the participants.



Athena & Minerva Rebuild

The Computer Science and Engineering Association (CSEA) rebuilt Minerva, the official website of the CSE Department, replacing a decade-old system that relied on hardcoded updates and an unreliable backend. The platform was developed using Next.js and a Headless CMS, enabling secure, code-free content updates through an admin panel, with 15 years of legacy data migrated using custom scripts.

The project was a collaborative effort between the core development team and UI designers, with guidance from senior mentors and DevOps support. The Minerva project was led by Arun Natarajan, Hafeez Muhammed, and Aditya Kamble, with development contributions from Munukuntla Rithvik Reddy, Devadath Kartha, Nadeem M Siyam, Rohith S, and Richie James, UI design by Visruth Mohandas, Neha Suresh, and Tarun Nambiar, and mentorship from Mohammad Saad, Aritro Ghosh, and Jaefar Shameem.

Alongside Minerva, Athena, the website for the SSL Lab, was revamped from its previous version to centralize lab-related information.



The platform includes details of labs, lab rules, system specifications, servers handled by the department, and information on student administrators (past and present), faculty coordinators, and lab staff, along with links to individual lab course websites.

Athena was developed using Next.js, Strapi, and SQLite, led by Diljith Dileep and Mayank Gupta, with contributions from B22 students Naila Fathima, Vaishnavi Pai, Harshini Babu and Nandana Anand, and involvement from B23 students Anirudh N Kamath, Lishin V, Mihir P, Nandini M Prakash and Sreelakshmi Ganesh.



B21's Farewell - The Final Commit

The Computer Science and Engineering Department, in association with CSEA, organized the farewell ceremony "The Final Commit" for the graduating Batch of 2025 (B21) on 4th April 2025 at the Auditorium from 5:00 PM to 9:30 PM, marking the conclusion of four years of academic and personal growth.

The Oscars-themed event brought together students and faculty for a heartfelt and memorable occasion, blending emotions of nostalgia, excitement for the future, and appreciation for the time spent together.

Dr. Subashini R, Head of the Department, delivered the welcome address, highlighting the batch's achievements, followed by faculty reflections on the students' growth and words of encouragement. Aritro Ghosh, Mohammad Saad, and Mohammed Ameen were presented with special awards by the faculty.

Students and class representatives shared memorable experiences, while certificates were presented to SSL administrators, CSEA members, and students holding positions of responsibility for their contributions to the department. Adding to the excitement, The Final Commit Awards were presented through a structured nomination and voting process, celebrating the batch in true Oscars style. The evening also featured cultural performances by students.

The farewell concluded on a warm and emotional note, leaving the graduates with cherished memories and best wishes as they move forward in their journeys.



B25's Orientation - CSE 101

The department-level UG Orientation Programme for the B.Tech 2025 admission students was held on 25th August 2025 at the East Campus Lecture Complex (ECLC). The programme aimed to introduce freshers to the department, academics, and campus life at NIT Calicut.

The orientation was held simultaneously in ECLC B (CS01 & CS03) and ECLC J (CS02 & CS04). The programme began with the reception of students and snack distribution, followed by an introduction to the department by Dr. Subashini R, Head of the Department, and an overview of the B.Tech curriculum by the Programme Coordinator.



The programme also included an introduction to the Computer Science and Engineering Association (CSEA), an interactive session with the Faculty Advisor team, a Q&A session, and a vote of thanks.

A student-led presentation by fourth-year CSEA members Hafeez Muhammed, Vaishnavi Pai, Aditya Kamble, and Harshini Babu offered insights into academics and student life. CSEA members also assisted with coordination and conducted a student-led campus tour for around 200 students.



The programme provided a welcoming and structured introduction, helping freshers begin their journey at NIT Calicut with confidence.

The Skylight Exhibition

In celebration of the 65th Foundation Day of NIT Calicut, the Computer Science and Engineering Department presented a showcase of student projects and research at SKYLIGHT 2025. Under the faculty coordination of Dr. Jayaraj P B, the CSED team organized Stall 12, featuring a mix of interactive demonstrations and academic displays.

The stall attracted significant interest through its hands-on exhibits. A primary draw was a Virtual Reality (VR) station where visitors could engage in a digital drumming and piano simulation, highlighting applications in immersive media. This was complemented by student-developed games, including a localized NITC GeoGuessr, which provided a light-hearted way for visitors to engage with the department's display.

On the academic front, the exhibition featured a collection of research papers and specialized hardware prototypes developed within the department.

These included a Coconut Plucker Drone and a Cancer Screening Camera, showcasing the department's efforts in exploring automation and medical imaging. The exhibit was supported by a volunteer team of B.Tech, M.Tech, and Ph.D. students, along with faculty members and staff members, providing a broad look at the department's ongoing activities.



CSE Onam Celebration

The festive season returned to the department on September 2nd, 2025, as the CSEA hosted "cs.exe 10nam," a vibrant celebration of Onam held at the Auditorium. The event brought together students and faculty from across all batches, all dressed in traditional Kerala attire, to celebrate the cultural heritage of the state. The evening was expertly steered by our hosts, Reja and Anish from the B24 batch, who kept the energy high throughout the night.

The evening commenced with the traditional lighting of the lamp by the Head of Department and other esteemed faculty members. This was followed by a series of light-hearted events, including the faculty lemon and spoon race, which saw Dr. Jimmy Jose winning once again. Attendees were of course served the traditional sweet payasam.

Of course, no Onam celebration is complete without Vadam Vali. The celebration witnessed a series of intense tug-of-war matches, starting with a student division that saw the B24s pull their way to victory, earning a 'vazha-kula' (banana bunch) from the HOD. The faculty had a match of their own.

The stage remained alive throughout the evening with numerous cultural performances, including a variety of songs and dances by students across all years. The crowd favorite however was the super energetic Chenda Melam performance that brought the celebrations to a high-spirited close.



Swachhotsav

The Department of Computer Science and Engineering observed Swachhotsav – Swachhata Hi Seva 2025 as part of the institute initiative leading up to 2nd October 2025. As directed, the department conducted activities including outdoor premises cleaning, indoor classroom and laboratory cleaning, e-waste and junk segregation, and awareness creation.

The outdoor cleaning activity was carried out on 26th September 2025 with participation from faculty, staff, and office personnel. Classroom and laboratory cleaning activities took place on 29th and 30th September 2025 with the involvement of students and research scholars. E-waste and junk segregation activities were coordinated by the technical staff team.

The Computer Science and Engineering Association (CSEA) organised awareness activities in the form of poster, painting, and slogan competitions for students. Nandini M Prakash and Joshua Jacob Thomas secured the first and second prizes respectively.

The activities helped enhance cleanliness within the department and reinforced a culture of shared responsibility.



CSE 201

On December 8, 2025, the Computer Science and Engineering Association (CSEA) conducted CSE 201, an online internship and development roadmap session specifically for the B.Tech 2024 admission batch (B24).

Led by Nithin R, Nandini M Prakash, and Sahil Muhammed, the session was designed as an interactive guide to help students kick-start their internship preparation. The workshop covered a comprehensive range of topics essential for career development, including building a strong resume, strategies for DSA preparation, and the importance of projects and interview readiness.

The speakers also provided clarity on the functioning of the Centre for Career Development (CCD) and the importance of maintaining a solid academic foundation, such as managing one's CGPA. The session served as a practical roadmap, offering the B24 batch the direction needed to align their academic and technical efforts for future opportunities.

Talks and Guest Lectures

Prof. M.N. Neelakantan Memorial Lecture Series: On December 30, 2024, the department hosted the 15th lecture in the Prof. M.N. Neelakantan Memorial Lecture Series at NLHC 102. The session, titled "Unlocking the Future: Exploring the Technology Industry Landscape and Preparing for Successful Careers," was delivered by Sri. Pramodkumar K, Head of IT Operations at Philip Morris International, Tokyo.

An alumnus of the NITC MCA batch (1991-1994), Sri. Pramodkumar used his 30 years of industry experience to guide over 100 students on navigating the evolving IT landscape and building successful global careers.

Opportunities for Pursuing MS Research in the USA:

Prof. Hari Sundar, an Associate Professor at Tufts University specializing in high-performance computing, visited the CSED seminar hall on January 3, 2025 to deliver talk which provided a roadmap for students interested in graduate research abroad, focusing on the skills required for interdisciplinary research. He emphasized how computational techniques are currently transforming scientific discovery and solving global challenges, offering students practical advice on approaching MS and PhD opportunities in the USA.

Talk on AI Agents and Agentic Workflows:

On January 6, 2025, Prof. Aravind S. Kumar, a Senior Software Engineer at NVIDIA (USA), delivered a cutting-edge talk at NLHC 102. The session delved into the development of agent-based systems and blueprints designed to optimize organizational efficiency. He explored the integration of intelligent systems into real-world business operations, providing a comprehensive look at how agentic workflows are shaping a future of more adaptive and intelligent enterprise environments.

Talk on 5G/6G: Next Generation Networks: On January 7, 2025, Shri. Narayana Pai, Senior Product Architect at Tejas Networks, spoke at the ECED seminar hall.

His talk provided a deep dive into the evolution of mobile networks, tracing the journey from 4G to 5G and the emerging frontiers of 6G. He discussed the massive potential impact of these networks on various industries alongside the technical challenges of modern telecommunications, sparking a lively discussion on the future of global connectivity.

Talk on Interactive Proofs:

Theory and Applications: Dr. Venkata Koppula, an Assistant Professor from IIT Delhi, delivered a highly engaging talk on October 22, 2025, at a packed NLHC 102. The session explored digital signatures and the evolution of "interactive proofs" as a method for verification involving multiple parties. Dr. Koppula used an interactive problem-solving approach to discuss complex topics like cryptography in photography, Hall's theorem, and graph non-isomorphism. This talk received over 200 registrations from students and research scholars.

Talk on Complexity of Sum of Square Roots Problem:

On October 27, 2025, Prof. Nikhil Balaji from IIT Delhi conducted a session at NLHC 102 regarding the Sum of Square Roots (SSR) problem. He illustrated the deep theoretical challenges of the problem, such as why standard numerical approximations fail due to precision limits, citing Ron Graham's example of differences smaller than 10^{-34} . The lecture bridged algebraic foundations with computational complexity theory, even touching upon the "machine learning" model of computation before concluding with an interactive Q&A session.



FOSSMeet '25

FOSSMeet '25 was held from March 14th to 16th, 2025, transforming the NIT Calicut campus into a vibrant hub for open-source learning and collaboration. The event brought together developers, students, and technology enthusiasts united by a shared interest in Free and Open-Source Software (FOSS). Through a diverse lineup of talks, hands-on workshops, and interactive sessions, participants explored both foundational and emerging technologies in the open-source ecosystem. Beyond technical discussions, FOSSMeet '25 fostered meaningful conversations, networking, and knowledge exchange, reinforcing the values of openness, collaboration, and community-driven innovation. The event served as an inspiring platform for attendees to learn, contribute, and grow together within the global open-source community.

The event began with an opening note that outlined the vision and flow of the three-day programme.

Day 1 focused on introducing participants to the foundations of FOSS, helping newcomers and experienced contributors alike understand the broader ecosystem. Sessions explored policy, privacy, and pathways into open source, while encouraging community interaction.

- Core FOSS concepts and policy frameworks
- Privacy-preserving technologies and digital rights
- Guidance for newcomers entering open source
- Birds of a Feather (BoF) session for informal discussions



Day 2 emphasised hands-on learning and practical exposure to modern technologies, offering participants valuable opportunities to explore tools and systems widely used in today's open-source landscape. Through immersive workshops and guided sessions, attendees engaged directly with real-world workflows and problem-solving approaches. The day struck a thoughtful balance between structured learning and open experimentation, encouraging collaboration, peer learning, and active participation throughout.



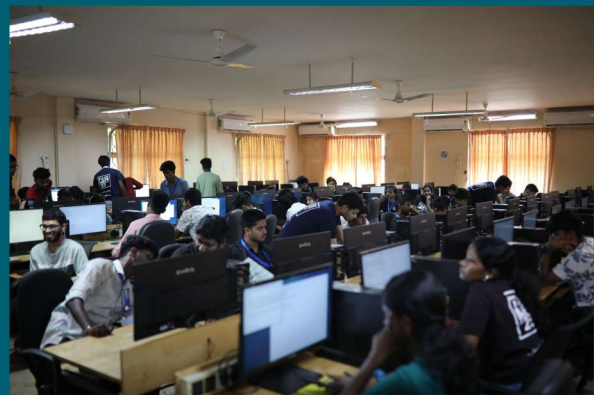
- Custom Linux distribution creation and open hardware design
- Scalable open-source frameworks and cloud-native tools
- Parallel workshops on GPU programming, Kubernetes, SDRs, and modern languages
- Evening discussions and an open lab session

Day 3 centered on the philosophy, legal aspects, and sustainability of open source, focusing on the importance of community and long-term impact beyond just code. The sessions encouraged participants to reflect on the values, responsibilities, and practices that help sustain open-source projects over time.



- History and philosophy of the free software movement
- Open-source licensing and legal considerations
- Building inclusive and sustainable technology communities
- Closing note concluding the event

FOSSMeet '25 successfully fostered a spirit of learning, collaboration, and community engagement, creating an inclusive space for participants to share ideas and build meaningful connections. The event left attendees inspired and motivated to continue contributing to the open-source ecosystem, carrying forward the values and enthusiasm cultivated during the three days well beyond the event itself.



SUCCESS STORIES



JAYAFAR MOIDU

-Batch of 1992



From the NIT Calicut campus to building an IT enterprise spanning over 30 countries, it's been quite a journey. When you think back to your time at NITC, what's one moment that still makes you smile today?

Whenever I hear REC or NIT Calicut, the first thing that comes to my mind is Rajpath, which is the road leading to the main building.

On my very first day, I came with my father for admission. We got down near the canteen, and I walked behind him. As we passed the canteen, some seniors noticed me and stopped me while my father walked ahead. They asked the usual questions about my name, background, and where I was from. That evening, seniors from Madhya Pradesh invited me to have dinner with them at the canteen.

That first day had everything. I felt noticed, tested, and welcomed. Even today, it makes me smile.

NITC has produced engineers, leaders, and entrepreneurs across generations. How much of your professional foundation do you credit to the curriculum, and how much to the people and culture you experienced here?

I was never someone who lived only in classrooms. If I had a choice between the classroom and the ground, I often chose the ground.

Most of what shaped me came from people, friendships, and experiences outside academics. College teaches you how to interact with people from different backgrounds, how to adapt, and how to build confidence.

The friendships I made during those four years stayed with me for life. Some of the people I met in college are still professionally associated with me even today. Those four years at REC were the golden era of my life, and the culture played a very big role in shaping who I became.

Was there a professor, project, or setback during NITC that shaped the way you think today?

I wouldn't attribute my growth to one single professor, project, or setback. Each played a role. Every professor helped shape the way I think. Every project taught me something about execution and accountability. And every setback, without exception, taught me humility and self-awareness.

But if I had to point to one influence that shaped me at a deeper level, it would be sports. I captained teams, played cricket at the university level, and competed at the national level in athletics and Kho Kho. Sports teaches discipline when you want to relax.

It teaches teamwork when your ego wants credit. And it teaches humility. Because one overconfident over can cost you a match, and one lazy week can cost your fitness. Years later, I realised entrepreneurship is surprisingly similar. You train consistently, you respect the team, you take responsibility for outcomes, and you learn very quickly that talent alone is never enough.

Before founding JMR Infotech, you spent several years in the corporate world. When did you realise you wanted to build something of your own?

The entrepreneurial mindset actually started during my college days.

I come from a middle-class family. My father was a central government employee who strongly believed in independence. His rule was clear. Education would be fully supported, but once college ended, I had to stand on my own. Even interview expenses were my responsibility. During college, when computer education was booming, I started teaching at computer institutes on weekends. It didn't pay much, but it taught me something important. It taught me that value creates income. After college, I worked in a corporate environment. Six months into it, I realised that I wasn't meant to work for someone else. Entrepreneurship, for me, started with taking responsibility, not with registering a company.

Banking and Financial Services became a key focus area for you. Was this a deliberate choice, or did it evolve with experience?

It evolved a lot through experience. I spent close to 15 years working inside banks, including nine years with HSBC in the Middle East and later as IT Director at Al Rajhi Bank.

That exposure taught me the difference between technology that looks good and technology that actually works under pressure.

I also saw gaps in how vendors operated: finger-pointing, lack of ownership, and excuses. I knew that if I ever built a company, it would be customer-centric, ownership-driven, and outcome-focused. Banking and Financial Services became my niche because I understood it deeply and saw the opportunity to do things differently.

What was the riskiest decision you took while starting JMR Infotech?

The biggest risk I took was putting everything I had into the business after nearly 15 years of working.

At that stage of life, most people focus on security such as buying a home, settling down, and creating a safety net. I did the opposite. I invested all my savings into starting the company. From day one, it was a completely self-funded operation.

I started with a 10-member core team, most of them hired directly from Oracle Financial Services. They had strong capability, but also significant overhead from the beginning. With the first major engagement, we scaled rapidly. We went from 10 to nearly 60 people in a very short time. Everything hinged on that one opportunity.

Looking back, it was a big risk. But it forced clarity, discipline, and complete ownership from day one. Those traits became the foundation on which JMR was built.

What was the most unexpected non-technical skill that helped you build JMR Infotech?

As an engineer, you're trained to question. Why is this happening, and how does this really work? That habit stayed with me.

Over time, I realised that the most powerful non-technical skill I developed was curiosity combined with deep listening.

I naturally tend to go to the root of problems. I try to understand what's really going on, not just what's visible. Many business challenges appear technical on the surface, but once you listen carefully and ask the right "why" questions, you realise they're often human or process-related.

That ability to listen deeply and think at the root level helped me make better decisions, build trust, and solve problems that technology alone never could.

Entrepreneurship is often glamorised today. What's a tough phase that founders should be prepared for?

The most difficult phase is the initial take-off and monetization period. Many companies fail in the first three years because founders underestimate how hard it is to earn trust and generate revenue. Another challenge people rarely talk about is loneliness. As a founder, you may not know how you'll pay the next salary, but you still have to show confidence to your team.

I was fortunate to have my wife as a strong support system. Not everyone has that, and founder loneliness is very real.

With JMR expanding into AI, Machine Learning, and EdTech, how do you ensure innovation remains a mindset within the organisation?

Innovation is not a department; it's a mindset. You have to create a fearless environment where anyone can question anyone. Even freshers. The day people stop questioning leadership, decline begins. At JMR, we encourage open dialogue.

Alongside culture, we also have teams dedicated to tracking technology trends globally and translating them into practical direction for the organisation.

Technology evolves rapidly. How do you ensure JMR stays aligned with emerging trends?

It's a balance of mindset and structure. Internally, curiosity, questioning, and root-cause thinking are encouraged. Structurally, we have teams constantly monitoring global trends and feeding insights back into the organisation so we stay relevant and prepared.

What are your views on hustle culture?

There has to be balance. Hustle without balance is borrowed time. I was fortunate early in my career to work with exceptional managers. They were people who trusted me, empowered me, and built strong personal rapport. That shaped my thinking deeply.

People make or break organisations. Most of us work from our early twenties into our sixties or seventies. That's 40 to 50 years of our prime life, and nearly half of that time is spent at work. Home gives comfort and emotional safety.

At work, we should aim to create something similar, a second home. Work should feel like a place you want to come to on Mondays, not escape from. Bosses should be mentors, colleagues should feel like friends, and politics should have no place. In such an environment, hustle becomes natural. But when someone faces a medical issue, a family problem, or a personal crisis, hustle must take a backseat. The human comes first. That balance between ambition and empathy is what makes success sustainable.

When you disconnect from work, how do you like to spend your time?

Earlier, I was a workaholic. Today, I value quiet time. I read, follow global developments, play cricket, focus on fitness, and go for long walks. Over the last several years, I've also gone through a deep spiritual journey, which has reshaped how I see life, people, and success.

Many students hesitate, waiting for the 'perfect time' to start. What would you tell them?

There is no perfect time. Start early, but start prepared. Research deeply, validate your idea with real customers, co-create where possible, and prepare for monetisation. Never rely only on gut feeling. Validate it with data and conversations.

If you were graduating from NITC today, would you jump straight into entrepreneurship or recommend corporate experience first?

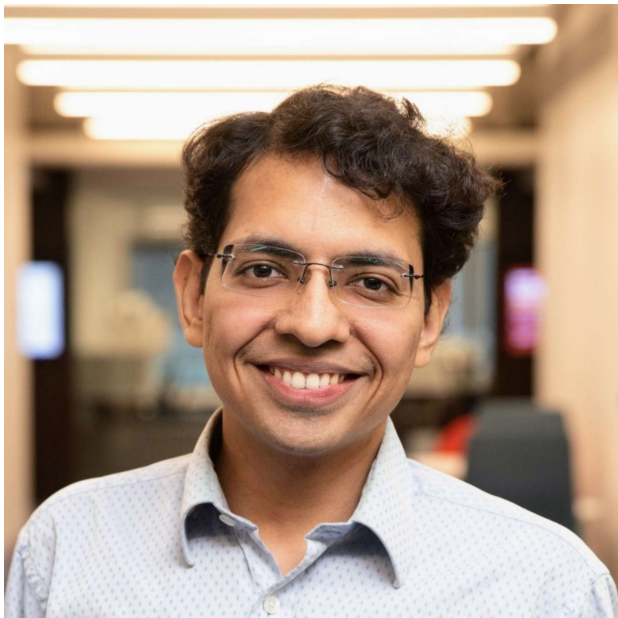
It depends on the individual. What matters most is mindset, discipline, and responsibility. Whether you learn through corporate experience or entrepreneurship, consistency, coachability, and the ability to sell are non-negotiable.

Finally, what is the one core value you hope the next generation of NITC alumni carry forward?

Character. Degrees matter sure, success matters, but character matters most. If you become a good human being, everything else will follow.

KARTIK SINGHAL

-Batch of 2013



How has undergraduate student culture and the tech landscape changed since your time at NITC?

One of the biggest changes is the advent of AI tools like ChatGPT and large language models. We didn't have anything like that during my undergraduate days. These tools have significantly changed how students learn and solve problems.

More broadly, access to high-quality learning material has improved immensely. Today, there are free online courses, open-source tools, and vast resources on GitHub. When I was an undergrad, GitHub was just starting out. I created my account around 2012. Now, students don't have to rely solely on textbooks or teachers; there's an entire ecosystem online that supports self-learning.

In the last couple of years especially, these AI tools have made it much easier to find answers when you're stuck. That's a very recent and impactful shift.

What was the biggest adjustment when you moved from campus to the software industry?

I wouldn't call it a culture shock, but the biggest difference was that real-world problems are far less well-defined. In college, assignments and labs are carefully structured, and instructors already know the solution. In industry, especially at my first job at Oracle India, the problems were messy. I worked on a massive C codebase that had parts written as far back as the 1980s.

You're often dropped into unfamiliar code written by dozens of people over decades. You need to understand the system architecture, develop strong debugging skills, and work under time pressure. Despite training, much of the learning happens on the job.

That said, the foundational skills from undergrad, like data structures, algorithms, operating systems, were incredibly useful.

You worked at Oracle for two years. What motivated you to leave a stable job and pursue a Master's degree in the US?

Stability and income aren't everything, especially when you're in your early twenties. I wanted to work on more interesting problems and grow intellectually. At Oracle, I noticed that many bugs could have been prevented by using modern, safer programming languages. That got me interested in programming language design and languages like Go, Python, and later Rust.

I also explored M.Tech options in India, but I was advised that if I wanted to work deeply on compilers and programming languages, the US would be a better fit. Additionally, I wanted to create new knowledge, not just maintain existing systems. That, combined with modest pay and limited scope for growth at the time, pushed me toward graduate studies.

You're currently with Quantinuum. For students who may not be familiar with this space, how would you describe the company and the work you do there?

Quantinuum is a full-stack quantum computing company. We build quantum hardware, develop the entire software stack around it, conduct research, and create products that run on quantum computers. I work as a compiler engineer. My role involves translating high-level quantum programming languages into instructions that quantum hardware understands. While the work is similar to classical compiler engineering, quantum computing adds complexity because the instruction sets and architectures change frequently. We're still in the early stages of defining standards, so compiler design must evolve alongside the hardware.

Are there any undergraduate courses you didn't expect to use but now rely on heavily?

Almost all of them, honestly. Data structures, algorithms, operating systems, compilers, and even theory courses like automata and computation theory are directly relevant to my work.

Even courses I don't use daily, like databases or networks, help me communicate effectively with teammates who specialize in those areas. I don't remember taking any CS course that turned out to be useless.

How should beginners approach understanding a large, unfamiliar codebase?

Nobody reads a codebase line by line. The key is understanding the system at a high level first.

Start by learning the architecture: what the major components are and how they interact. Documentation helps, but so do conversations with teammates. When fixing a bug, focus on reproducing it and using tools like stack traces to narrow down where to look. Good editor navigation, debugging tools, and knowing where not to spend time are just as important as reading code.

Before tools like ChatGPT, how did you learn technologies not taught in college?

Through documentation, tutorials, open-source communities, books, and forums like Stack Overflow. Learning Git, debugging tools, and new programming languages happened largely through hands-on projects.

Books helped, but they became outdated quickly. The most effective learning came from building real things and engaging with communities that were both online and offline.

What small decision in college ended up having a big impact on your career?

Surely, getting involved in open-source communities. I participated in FOSS meetups, learned Linux on my own, helped organize events, and even built the Computer Science department website at NITC.

Those projects taught me real software engineering skills and helped me build a strong network. I also regret not doing internships earlier. It's something I strongly recommend students do as soon as possible.

With AI and automation reducing team sizes, should students be worried about job prospects?

AI tools definitely improve productivity, and I use tools like GitHub Copilot regularly. But they don't replace core computer science knowledge.

Especially in cutting-edge fields like quantum computing, new problems don't have existing solutions for AI to copy. Students who understand fundamentals and know how to use modern tools effectively will stand out

How should students decide between industry and research careers?

By trying both. Do internships to experience industry. Work on research projects with faculty to understand academia.

Research requires patience. You may not see the impact of your work for years. Industry offers quicker feedback and tangible outcomes. It took me nearly a decade after college to fully understand what suited me best, so don't rush the decision.

What are some key things you wish you had known during college?

- How to learn effectively (spaced repetition, active recall)
- Time management and prioritization
- The importance of writing and reading technical material
- Learning high-level languages like Python, Java, or Rust
- Doing practical, hands-on projects alongside coursework

I've written about these in detail on my blog, which I encourage students to read. (Check it out here: <https://kartik.in.net/>)

Is there anything students today absolutely must hear?

Be curious. Go beyond the syllabus. Build real things. Network with people. Try uncomfortable or unfamiliar areas, you never know where they might lead because college is where exploration starts, not where it ends.

KARUN THANKACHAN

-Batch of 2015



Let's start with something nostalgic. What's something from your time at NIT Calicut that might surprise students today?

I graduated in 2015 and last visited campus around 2018, so I'm not entirely sure what has changed since then. One thing that would definitely surprise students today is the second-year hostel situation during our time.

Due to an increase in student intake and delays in student housing, many second-year students were accommodated in faculty apartments. Since several of those apartments weren't fully occupied by faculty, students stayed there temporarily. These apartments were located near what is now the new library building, guest house, and faculty quarters.

Living there meant long walks to the canteens, and many of us relied on a smaller micro canteen, which students today might not even be aware of.

If you could give your first-year self one piece of advice, what would it be?

The biggest advice would be: don't hesitate to talk to professors. It took me almost four years—until my final-year project—to realize how approachable many professors actually are. At that age, I felt there needed to be a respectful distance, which is true to an extent, but many faculty members are genuinely interested in mentoring students.

Professors were always open to conversations. If you showed interest, they would actively help, even suggesting research ideas, conferences, and publication opportunities. I wish I had realized this much earlier.

Were there any courses or professors that influenced your interest in data science and analytics?

Yes, two courses played a major role. The first was Computational Intelligence. That course laid the foundation for my understanding of machine learning and later motivated me to pursue Andrew Ng's online course.

The second was Data Mining. Although the tools used were slightly outdated, the course itself was strong in terms of concepts and helped build my understanding of data analytics. These two courses together sparked my long-term interest in data-driven work.

You started your career as a Software Engineer and now hold two patents. What is the value of pursuing patents today?

Pursuing patents solely for the sake of having patents doesn't make much sense. They're more like a branding advantage they don't hurt, and they often open doors.

My first patent evolved organically from my final-year research project, which led to a paper that became one of my most cited works. In industry, much of the work is feature-driven, so I participated in hackathons to keep innovating. Ideas from those hackathons eventually turned into patents. Patents help with networking, spark curiosity in interviews, and create opportunities, but they shouldn't be the primary goal.

How was the transition from the Indian education system to Carnegie Mellon University?

The biggest difference was the emphasis on projects over exams. At CMU, written exams account for only about 20% of the grade, while the rest is based on long-term assignments and projects. You can't prepare overnight and do well—projects take weeks of consistent effort. The workload is intense, and burnout is common, but I don't think I've learned as much in any other two-year period of my life. Despite the challenges, it was a highly rewarding experience.

Mentorship seems to be a recurring theme in your journey. How did it shape your career?

Almost every major opportunity I've had came through mentors. At NIT Calicut, seniors helped us understand interview preparation, competitive programming, and placement expectations. Later, mentors in industry helped me transition into data science and machine learning. At CMU, mentors played a key role in helping me land my first role at Amazon.

Because mentorship has had such a strong impact on my life, I now mentor others as a way of giving back.

What advice do you most often give your mentees?

The most common advice I give is that a data scientist's job is to solve business problems, not just build models. Understanding the business context behind a problem is critical. The better you understand why something matters, the better your technical solution will be.

What separates a good data scientist from a great one?

Two things stand out. First, a strong understanding of the business knowing what problems are worth solving and what data is available. Second, the ability to learn quickly. Real-world problems often require combining multiple approaches, reading literature, and adapting models based on context rather than relying on familiar tools.

What personal habit or mindset has helped you most in your professional life?

Consistency over perfection.

Early on, I tried to get everything perfect, which often slowed me down. Over time, I realized that consistent effort, early feedback, and continuous improvement lead to much better results.

How do you stay updated with AI and machine-learning trends while managing a demanding role?

I rely on simple, repeatable habits. I follow researchers and practitioners online, staying aware of trends, and reading at least one research paper every week.

I also host mentoring sessions where we discuss interesting papers and emerging ideas. Teaching and discussing research helps reinforce my own learning.

With AI and automation reducing team sizes, should students be worried about job prospects?

AI tools definitely improve productivity, and I use tools like GitHub Copilot regularly. But they don't replace core computer science knowledge.

Especially in cutting-edge fields like quantum computing, new problems don't have existing solutions for AI to copy. Students who understand fundamentals and know how to use modern tools effectively will stand out.

How have AI tools like ChatGPT changed your workflow as a data scientist?

AI tools are now part of my daily workflow. They help with writing code, speeding up literature reviews, and creating documentation. By reducing repetitive tasks, they allow me to focus more on problem-solving and strategic thinking, which adds the most value.

How has content creation influenced your professional growth?

Content creation started organically when people began asking about graduate school applications and interviews. Writing about these experiences helped me build a strong professional network. During career transitions, especially in uncertain times, that community proved invaluable. The biggest benefit of content creation has been the network and shared learning it creates.

How has being an NIT Calicut alumnus helped you in your career?

The NIT Calicut brand definitely helps with placements, internships, and even cold outreach.

More importantly, the strong academic foundation, supportive professors, and long-term relationships continue to be valuable even years after graduation.

What advice would you give students currently preparing for tech placements?

Start early and prepare based on the role you're aiming for. Build strong projects that demonstrate relevant skills, understand interview expectations, and learn from seniors who've already gone through the process. Talking to seniors and professors can give you clarity that no online resource can replace.

Is there anything else you'd like to share with current students?

Reach out, whether it's to professors, seniors, or alumni. They genuinely want to help. The earlier you start these conversations, the more clarity and confidence you'll gain.



TECH TRENDS

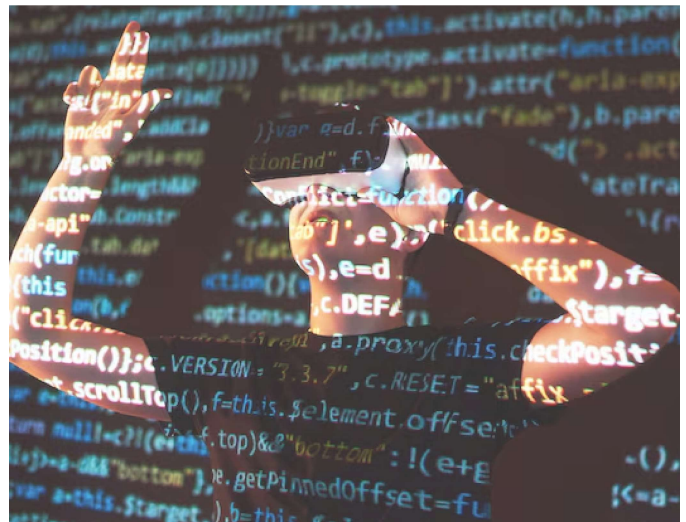
RESURGENCE OF FUNCTIONAL PROGRAMMING

Functional programming emerged in the 1950s, a programming paradigm where computation is treated as the evaluation of mathematical functions and not just step by step instructions. It came about long before modern computers or software engineering practices. Early computers were unreliable, and this facilitated the rise of functional programs, whose math-based computations promised correctness over convenience. Early functional programming languages like Lisp were eventually outgrown by more imperative, performance-oriented languages. Mainly designed for symbolic computation, Lisp has now once again risen in the field of AI, research and mathematical reasoning. But then, why did functional programming go down as fast as it rose to fame?

Functional programming was not wrong, it was just early. It was designed for a world where software had to be correct, not fast or friendly - it was too pure for the messy real world of early industry. Moreover, it required understanding of abstract mathematical concepts like functions, recursion and immutability. Business software at the time needed fast results, not mathematical beauty. But now things have changed - AI has evolved, systems have grown massively in scale, and software now demands correctness, concurrency, and reliability over raw instruction-driven control.

Modern systems are multi-core and distributed, and face race conditions and deadlocks, which is avoided by functional programming by its immutability property and pure functions.

Thus, this makes it the ideal solution for financial systems, distributed services and fault-tolerant software. Common programming languages today which have adopted functional programming concepts include Haskell, Scala, Java, JavaScript and Python. Scala is popular in large-scale distributed systems, and is used by companies handling big data and concurrency. It serves as a natural fit for data pipelines, reducing hidden dependencies between components and encouraging modular design, making it easier to refactor over time.



Functional programming is now in the spotlight, ideas from the 1950s are now fixing 21st century software problems. This represents the rare case of old math outliving modern hacks; programming trends aren't linear, they're cyclical. This mirrors scenarios like the microkernel, and the concept of virtual machines and virtualization - they were discovered ahead of their peak time in the industry. Sometimes, the future of software lies buried in its past.

THE EVOLUTION OF SPATIAL COMPUTING

Spatial computing is the technology that enables the natural understanding and awareness of physical and virtual worlds. It is all about harnessing spatial data, which can be any of three-dimensional, location, time and behavioural data, to transform how we understand and simulate the real world. This gives rise to highly immersive experiences, including AR, VR and MR. It serves the ability to serve the right information at the right time with the right view, through a natural, humanized, three-dimensional medium.

Augmented Reality overlays digital elements onto the real world, as seen in Instagram filters and Google AR navigation. Virtual Reality replaces the physical world entirely with a 3D simulation, popular for immersive games and walkthroughs. Mixed Reality blends real and digital environments more tightly, enabling users to interact with virtual objects as if they were real. Spatial computing makes all of this possible by powering realistic simulations, hands-free interaction, 3D visualization, and real-time spatial mapping, enriching environments for overall user experience.

Spatial computing is experiencing rapid growth and broad adoption across sectors, driven by a new wave of investment and technological convergence. A key reason for this acceleration is the emergence of new spatial hardware such as the Apple Vision Pro, Meta Quest 3, Microsoft HoloLens 2 and lightweight AR glasses like Xreal. Another major driver of this majestic frontier is AI. Modern spatial systems rely on AI for scene understanding, gesture recognition, creating real-time 3D

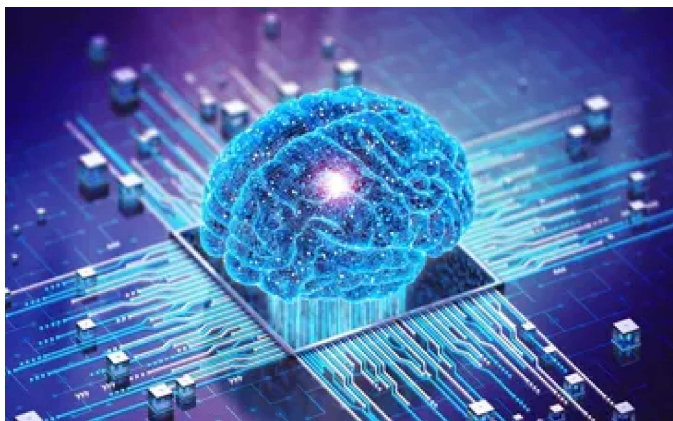


content, digital twins and 3D assets that were previously difficult (in terms of cost and time), reducing adoption barriers for companies.

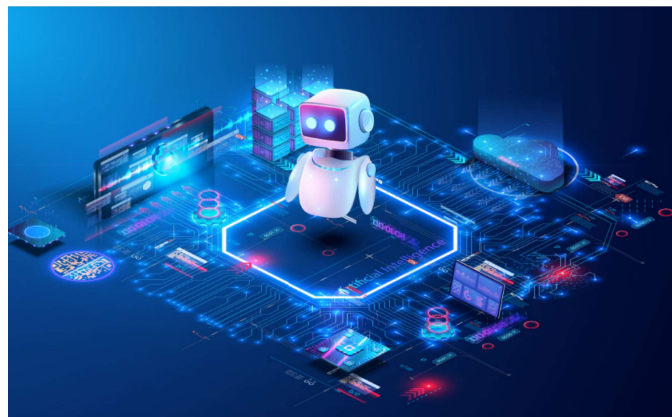
However, spatial computing comes with high costs and requires powerful processing for higher accuracy. Privacy can be a major concern due to environment scanning and constant tracking, along with data security. Limited accessibility for people without high-end devices is also an issue. However, its merits outweigh these drawbacks, and as devices become lighter and more affordable, and as developers figure out smarter and safer ways to handle spatial data, spatial computing is likely to move from being a high-tech novelty to something woven into everyday life.

THE NEXT STEP OF AUTOMATION - AGENTIC AI

It's the age of AI now - and today, agentic artificial intelligence is causing a shift in how technology teams and how business units they support operate. This shift is of vital importance, with AI taking over most of the jobs led by humans, with increasing accuracy over time. The impact is not something tiny, and the way it is handled holds significance. Humans have now switched over to an automated learning approach for all sorts of business processes - one of them being for new-employee onboarding. Some other fields where Agentic AI is being integrated are customer service and automation, finance and banking, healthcare, sales and marketing, education - you name it!



The development of large language models (LLMs) has enabled enterprises to build agentic AI tools which can autonomously make decisions and take action to accomplish user-defined objectives. Agentic AI is very productive when it comes to handling repetitive tasks, seeking out information and resources, and doing work in the background. Furthermore, it lowers chances of human error and improves overall efficiency and process



speed. Agentic AI, unlike LLMs, can act on their own - initiating tasks and making decisions, working towards a defined goal, typically long-term. It breaks a complex task into steps, executing each along with proper progress monitoring and updates its strategy accordingly. Agentic AI is a combination of reasoning, acting, observing and planning, improving over time to give the desired output.

Along with the merits come the unwelcome shortcomings. Here, a single failure becomes very significant because AI systems often operate at massive scale where even a small mistake can cause large-scale harm, cost, or irreversible consequences. Data privacy, data leakage and security threats are valid without mention, and hallucination becomes much more dangerous. Attackers can subtly modify inputs to manipulate the agent's behaviour, causing large-scale unintended actions due to the autonomous behaviour of agents. Overall, with the right balance of technology and human oversight, automation can transform routine workflows into seamless, high-value experiences.

BEFORE

GAMING WENT MOBILE

I still remember vividly the day I saw the PlayStation Portable (PSP) for the first time. I was invited along with my brother to visit his friend's house and play with them. I was all ears when they mentioned they could play a dozen games in the new gaming gadget that he got recently. To me, this was something unheard of at that time - a dedicated console to play state-of-the-art games, within the palms of one's own hand.

At the time, it provided the complete gaming experience. Details such as vibration on enabling the turbo boost via the L&R trigger buttons while playing Gran Turismo or driving a car using the analog joystick bring out such memorable days that I was fortunate to experience. Blessed am I, to have been born into the short-lived era of dawning tech. Not too long ago when the Ataris were out, nor too close to the X-Box or PS5s, but just right to enjoy a bit of everything.

A faint hum from the aging battery, the smooth yet cool feel of the plastic, the unmistakable smell of old electronics, the faint rustle from the UMD drive, among other countless elements takes me and many from my generation down to memory lane, where we get to rejoice on all the joyful, exciting time that we got to have with the PSP. Despite the end of that era, it is still widely respected as a powerful gaming console.

Recently, I got to know that upon writing the disk from an external drive, it's even possible to play GTA V in the rusty ol' PSP 1000 series which was released 20 years ago, a testament to the longevity of the gadget and a tribute to the makers of the craft.

In contrast to most modern tech, development back then was primarily focused on the customer experience and ingenuity. I'd argue this was because people working in this field truly loved gaming and considered it as something they looked forward to using themselves. This goes to show that when love is mixed with dedication, what yields is an elite product that people remember not just as a piece of tech, but also as a treasured device that brings about cherished memories from the past.



Beyond emulation, there's also a renewed appreciation for the PSP's industrial design and practicality. In an era dominated by touchscreens, its physical buttons and analog stick feel refreshingly deliberate. Retro gaming channels on YouTube, resale platforms, and local markets continue to circulate refurbished PSP units, often paired with custom shells, upgraded batteries, and modern storage solutions that replace fragile UMDs altogether. The PSP's continued relevance proves that good design, when built with care and love, can outlast trends, generations, and even the companies that made it.

STUDENT
ARTICLES

THE GOLDEN AGE OF VIDEO GAMES

• Fahad Habeeb, B240034CS

The video games of today are technological marvels. Complex physics engines, gigabytes of textures, and realistic lighting are things we've come to think of as the baseline. With abundant memory (let's leave aside the RAM shortage for now) and powerful GPUs, it's easy to just ignore the countless optimisations and minor fixes that could have been made.

What's the point anyway? It's not like an extra megabyte of space saved is going to change anything. But this luxury was not something that could be afforded in the golden era of video games. Back then, developers had to work under brutal constraints and harsh memory limitations. And yet they managed to create masterpieces that continue to shine brilliantly today. So how did they manage this black magic?



The original Nintendo Entertainment System, a pioneer in the field, had a paltry 2 KB of system RAM. Handhelds like the Game Boy offered a similarly meagre amount (by today's standards, at least) of 8 KB. The original PlayStation had a whopping 2 MB of RAM and 1 MB of VRAM. By contrast, 8 GB of RAM is considered almost obsolete in this age. Entire games, their logic and graphics and sound, all of it

had to fit into cartridges a size smaller than a selfie you'd click on your phone. Under such circumstances, how could games ever be as luxuriant and wasteful as the ones of today?

Unlike modern CPUs, early processors were slow, lacked floating-point units, and had minimal instruction sets. Memory access was expensive, and storage was painfully limited. Developers simply could not afford to have large assets or wasteful abstractions. Every single design decision, be it how a character moved, how the background scrolled, or how the enemies behaved, was influenced by these limitations. Interestingly enough, these constraints served to propel the art direction into innovative worlds.

Let's take the example of Silent Hill 1, one of my favourite games. When players think of this game, the first thing that comes to mind is its oppressive atmosphere and the ever-present, suffocating fog. This creepy atmosphere makes Silent Hill 1 one of the most iconic games in horror gaming history. The funny thing is, this fog was never meant to be all that. Silent Hill 1 was released on the original PlayStation in 1999, but there was a major issue. The console couldn't render large environments clearly without severe performance drops.

To cover up this poor draw distance, the developers at Konami added a heavy blanket of fog over the entire town. This one simple addition forced players to face the unknown, to wander into the bizarre mist from which a monster could jump out at any second. Every street corner became a source of paranoia. Honestly, the game traumatized me. But it is this very eerie world, one that seemed to drip with malice, that captivated the attention of players worldwide.



Alright. That's cool and all. Pretty impressive stuff. But let's rewind a bit. In the winter of 1993, Dallas, Texas-based developer id Software released a game about a space marine killing demons, and history was made. Doom was the pinnacle of the first-person shooter on PC and beyond. It set the standard. With its decades-long history, "Can it run Doom?" is a statement that has deeply embedded itself in pop culture. So what's the magic behind Doom?

For a game that looked pretty three-dimensional, Doom was surprisingly flat. The entire world lived on a two-dimensional map. Rooms could never exist on top of each other, and you couldn't look up and down either. But even then, the game never felt limited in this way. By letting perspective do the heavy lifting, by creating an illusion that felt real instead of trying to simulate reality, Doom managed to convince us that we were in a fully 3D space. And how did it run smoothly and consistently on machines everywhere? The answer is fixed point arithmetic.

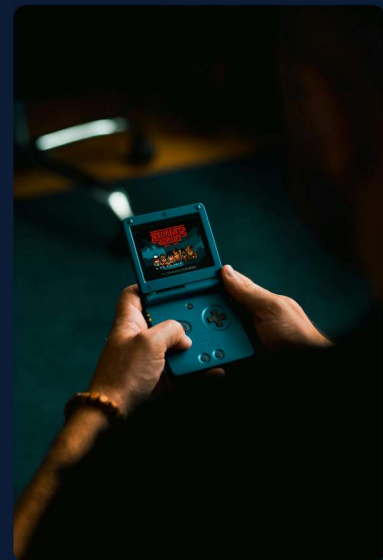
At the time of Doom's development, there was a significant speed advantage to avoiding floating-point instructions, which were quite slow especially on low-end CPUs that had neither an integrated FPU nor a coprocessor. Fixed point arithmetic is a compromise used in the Doom engine to have fractional values while still using integer instructions. In a fixed point system, a 32-bit integer is split into two parts: the upper 16 bits are the integral part, and the lower 16 bits are the fractional part.

For example, the value 2.5 is stored as 2.5×216 , which is 163,840. This ensured consistent behavior across different systems, a crucial requirement at a time when PC hardware varied wildly. The result was fast, smooth gameplay on machines that should not have been capable of it.

Now, let's move even further back to 1989, when the first Game Boy was released. With its 160×144 px screen that could handle only 4 shades of green and hardware that could only read 32 KB of data, the Game Boy feels laughably weak compared to the handhelds of today. With such limited space, how did they manage to even run a game? The secret was tiles. Instead of drawing entire images pixel by pixel, Game Boy games were built out of small reusable blocks called tiles.

Each tile was usually an 8×8 pixel image, and the screen was nothing more than a carefully arranged grid of these tiles. Rather than storing a full background, the game stored a limited set of tiles and a simple map describing how to arrange them.

Games *Pokemon Red* and *Blue* pushed this idea to its limits. Entire towns, caves, and routes were built using the same tileset, with variety coming from layout rather than new artwork. Even *Pokemon* sprites reused parts of each other. Data was compressed aggressively to make everything fit. The result was a surprisingly large and memorable world running on hardware that would barely



qualify as a calculator nowadays. What ties all of these games together is a simple idea: constraints force innovation. The developers of the NES era, the PlayStation generation, and the Game Boy golden age didn't have the luxury of throwing hardware at problems. Every kilobyte counted, every frame mattered. So they got creative. The PlayStation couldn't draw far enough, so *Silent Hill* got its fog. *Doom*'s CPUs couldn't handle floats, so it got fixed-point precision. The Game Boy couldn't store much, so *Pokemon* got its tiles. None of these were Plan A. But they became the reason we still remember these games decades later.

The Man Who Played God: Artificial Intelligence

The 6 W's and 1 H of the double-sided coin

▪ Joshua Jacob Thomas, B250906CS

Alright, let's face it. While some trends come and go, one force has been steadily growing in influence—Artificial Intelligence (AI). Whilst Instagram, YouTube, and similar platforms often get the better of us by tailoring content to our likes, tastes, and ever-evolving nonchalance, I find something else far more intriguing. The slow and seemingly omnipotent rise of AI, quietly seeping into our daily lives, has compelled humanity to turn the tables—towards outcomes that are either promising or precarious. Interestingly, there is an unmistakable essence of “AI stardust” embedded within social media platforms, and indeed, almost everywhere around us.

But why AI? What's in its nature that fuels our fascination? What promises—and perils—might it hold for the future? And most significantly, with AI as our anchor, how far can we push the limits of our potential? Answers to these questions lie buried in the blurred boundaries between ambition and reality.

Artificial Intelligence, or Asian Intelligence?

While most of us associate the residents of Asia, specifically those of China and Japan, with having reached the epitome of human development, resources, and intelligence, officials are (somewhat) pleased to report that Asians are not the brains and brawns behind AI.

Technically speaking, Artificial Intelligence refers to a broad domain of computational systems designed to simulate aspects of human intelligence. These systems rely on algorithms, data, and computational models to perform tasks such as pattern recognition, natural language processing, decision-making, and problem-solving. Modern AI is largely driven by machine learning (ML)—a subset of AI in which systems improve their performance by learning from data rather than following explicitly programmed instructions. A further specialization, deep learning, uses multi-layered neural networks inspired by the structure of the human brain to process vast amounts of data with remarkable accuracy.

AI systems operate by identifying statistical relationships within data. For instance, a language model does not “understand” words in the human sense, but instead predicts sequences of text based on probabilities learned from massive datasets. Similarly, computer vision systems detect objects not by sight, but by analysing pixel patterns and features across millions of images. This ability to process data at scales far beyond human capacity is what gives AI its apparent intelligence.



As philosopher and futurist Nick Bostrom aptly states, “Machine intelligence is the last invention that humanity will ever need to make,” emphasising that AI, once capable of self-improvement, could accelerate progress at an unprecedented rate.

Complicated? Think of AI as technology that can “think” and “learn” in its own way, helping us with everything from virtual

assistants like Siri and Alexa to self-driving cars to extensive GPT’s and personalized recommendations on Netflix, which is almost never the case for me.

The Good, The Bad, and The Ugly

If one were to envision that the thought and notion of Artificial Intelligence and its term came unto us from thin air, then you’d need a brief period in History and Science class. In reality, the groundwork for AI began in the early 1900s. And although the biggest strides weren’t made until the 1950s, it wouldn’t have been possible without the work of early experts in many different fields. Alan Turing, metaphorically and literally ‘The Father of AI’, published his work “Computer Machinery and Intelligence” which eventually became ‘The Turing Test’. This was harnessed by experts to measure computer intelligence.

“A computer would deserve to be called intelligent if it could deceive a human into believing that it was human,” Turing quoted. The term “artificial intelligence” was coined and thus, came into popular use.

• The “For” Loop (and/or) the “Good”

The majority of laymen and enterprise officials believe the name “Artificial Intelligence” is supportive of its nature. If you break it down, “artificial” means something made by humans, not natural; and “intelligence” is the ability to think, learn, and make decisions.

Put them together, and you get “Artificial Intelligence”: the idea of creating machines or software that can think and learn like humans. Per se, a slight suggestion in the 1956 Dartmouth Workshop Summer Research Project of the nomenclature “Artificial Intelligence”, has now reached global recognition and commanded status.

- **The “Elif” Statement (and/or) the “Bad”**

But like any powerful tool, AI isn’t without its critics. “‘AI’ is the wrong name, but the right idea.” “The term ‘AI’ has never sat well with me, partly because calling computers ‘artificial’ seems strange.” “The hard part of defining artificial intelligence is the intelligence part, not the artificial part.” The down-falls and pointers roll on endlessly. As always, the opposition proclaims the fact that the sudden, yet abrupt development and betterment of AI does not hold true with the name of “Artificial Intelligence”. Every time the computer succeeds at performing something once thought to require human intelligence, it is estimated that it can perform the same task without human involvement, provided that the model is allowed to marinate for a designated time. At this point, can we still call it Artificial Intelligence?

- **The “Break” Statement (and/or) the “Ugly”**

To put it short and simple, these people absolutely despise AI, and everything it stands for. Even those who say they are extremely knowledgeable about AI are more likely to believe it does more harm than good than to say it does more good than harm (31% to 22%). Quite a harsh of a reality twist, I agree.

A Boon, or a Bane?

1. The Weasel Stays Put (Boon and Benefits)

Forbes describes that AI has proved highly substantial to human development, with ease of living, effortlessness in completion of tasks, and a broad plethora of other positives, ranging from reducing human error and quick decision making to digital assistants and implemental and overall practical use. Imagine a world where time-consuming tasks fade into the background, where complex problems are solved before they even reach our desks. In medicine, AI analyses data to detect diseases early, saving lives before they’re even at risk. Or take education—AI-driven platforms like Khan Academy now adapt to each student’s pace, offering tailored lessons to boost learning. In everyday life, it’s that friendly assistant organizing our schedules, recommending new music, or even translating languages in real-time. When applied wisely, it’s a tool that unlocks possibilities as vast as our imaginations, transforming the way we live, work, and understand the world.

2 . Pop Goes The Weasel (Bane and Burdens)

Yet, as with any transformative technology, AI's potential for harm shadows its benefits, leading us to consider its more concerning impacts. While AI may be all fun and games until you get caught using Chat GPT for your 500-word essay, almost a staggering 76% of movies based on the aforementioned topic adversely depict AI as having overtaken the world and being reasons for mass havoc and destruction, examples of which are the Terminator series (1984), the Matrix series (1999), and the very recent Mission Impossible: Dead Reckoning-I (2023). "People worry that computers will get too smart and take over the world, but the real problem is that they're too stupid and they've already taken over the world," as said by Pedro Domingos, a Professor Emeritus.

Imagine yet another world, algorithms making decisions about who gets a job or even a loan—decisions rooted not in human judgment but in patterns that could reinforce biases. Or, think about AI taking over tasks so efficiently that entire job sectors vanish. And privacy? Only 43% of people trust AI tools not to discriminate or show bias towards any group of people, as per the IPSOS Consumer Tracker. It's under constant threat as AI learns from every click, every search, every digital move we make. In the wrong hands, AI could become a tool of surveillance, control, and even manipulation.

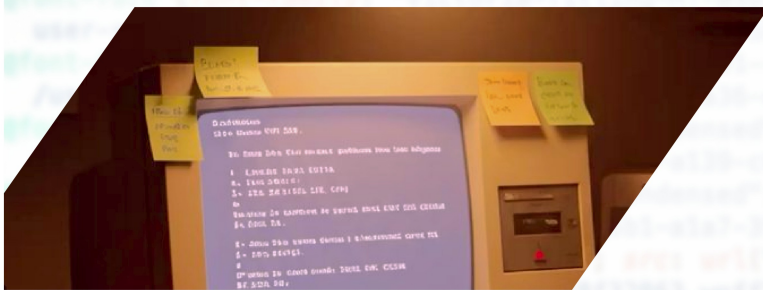
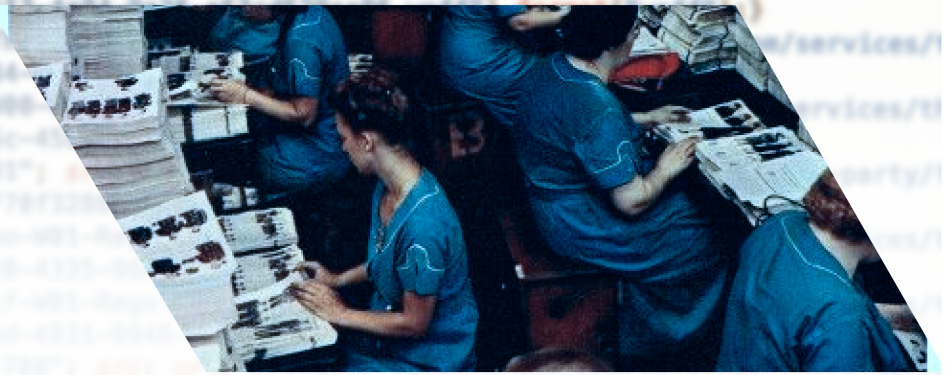
All together, does our future with AI look bright? Maybe. Maybe not. As businessman and investor Elon Musk rightly said, "I do think there should be some regulations on AI."

Back to The Future?

Well, we can never entirely predict the future. However, many leading experts ponder over the possible futures of AI, so it is in our right to make educated guesses. We can expect to see further adoption of AI by businesses of all sizes, changes in the workforce as more automation eliminates and creates jobs in equal measure, more robotics, autonomous vehicles, and a myriad more. According to a 2023 IBM Survey, 42% of enterprise-scale businesses integrated AI into their operations, and 40% are considering AI for their organizations.

As we gaze into the horizon, the future of AI presents a landscape that is both exhilarating and cautionary. The question is no longer just about what AI can do, but what it should do. In the years to come, AI will likely redefine what it means to be human, challenging us to stay one step ahead in a game we created yet can hardly predict. Me? All I hope is that we steer clear of any Ultron-style takeover [Avengers: Age of Ultron (2013)] while I'm still trying to relax on my sofa. Because, perhaps, AI really is the man who played God.

RESEARCH CORNER



Agentic AI-Assisted Nurse Care Coordination System for Indian Hospitals: A Three-Tier Implementation Framework

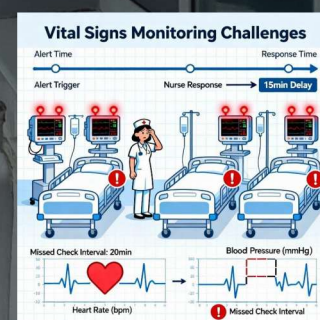
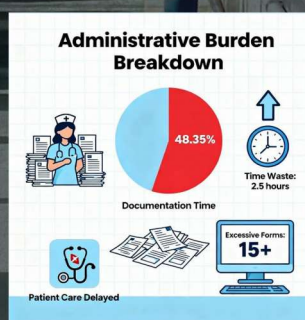
Rabeeath PM

India's healthcare system faces a deficit of over 4.3 million nurses, leading to unsafe nurse-to-patient ratios (1:10–1:20), 45.65% medication error rates, and 47% burnout. We propose an Agentic AI-Assisted Nurse Care Coordination System—built on a five-layer architecture integrating EMRs, IoT devices, and manual inputs—to automate routine coordination, monitor workflows, and deliver context-aware alerts while maintaining human-in-the-loop control. Specialized agents manage medication timing, vital signs, task prioritization, and early deterioration prediction via LangGraph orchestration, with multilingual support, tiered alerting, and automated documentation reducing reporting time from 35% to <15%. Compliant with India's DPDP Act, ABDM standards, and ICMR AI guidelines, the system scales from SMS-based reminders at PHCs to full ICU analytics in tertiary centers. Expected outcomes include lowering medication errors below 20%, burnout under 30%, and faster patient monitoring, thereby enhancing safety, efficiency, and equity across India's three-tier hospitals

Background

- India has only 1.9–2.1 nurses per 1,000 people, below the WHO-recommended 3 per 1,000, implying a shortfall of about 4.3 million nurses
- General wards often run at unsafe nurse-to-patient ratios of 1:10 to 1:20, and higher in many government hospitals, while safe care typically needs about 1:4
- Medication errors are prevalent, with an overall rate around 45.65% in hospitals and about 6.11% reported in critical care units
- Nurses spend approximately 19–35% of their working time on documentation instead of direct patient care.
- The workload burden is linked to high burnout, with about 47% experiencing personal burnout.
- Annual nurse attrition is estimated at 25–30%, further worsening staffing gaps.

Problem



Core Capabilities



Automated
documentation



Proactive
alerting



Goal-driven
coordination



Context-aware
decision-making



Adaptive
prioritization

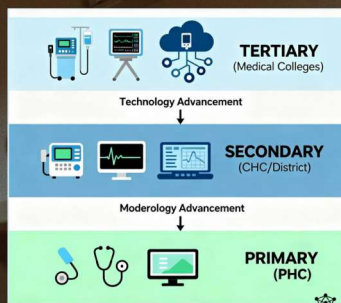


Multi-lingual
support

Technical Architecture

- Data Integration:** Aggregates data from HL7 FHIR compliant EMRs (aligned with India's ABDM), IoT medical devices (BP monitors, pulse oximeters, glucometers via MQTT/Bluetooth), manual nurse entries, and laboratory results
- Perception Engine:** Uses NLP and LLMs to interpret clinical context, stratify patients by acuity (low/moderate/high/critical per Indian ICU guidelines), and monitor environmental factors including nurse workload distribution
- Decision Core:** Employs specialized AI agents (Medication Timing Agent, Vital Signs Monitoring Agent, Care Task Prioritization Agent Deterioration Predication Agent) coordinated through LangGraph/AutoGen frameworks with RAG-enabled access to clinical guidelines and hospital protocols.
- Execution Layer:** Implements tiered alert routing (nurse → charge nurse → duty doctor), automated workflow coordination (lab requests, pharmacy orders), shift handover synthesis, and voice based nurse interaction
- Learning Loop:** Continuously refines alert thresholds, timing, and prioritization based on nurse response patterns and patient outcomes, with bias detection and equity monitoring

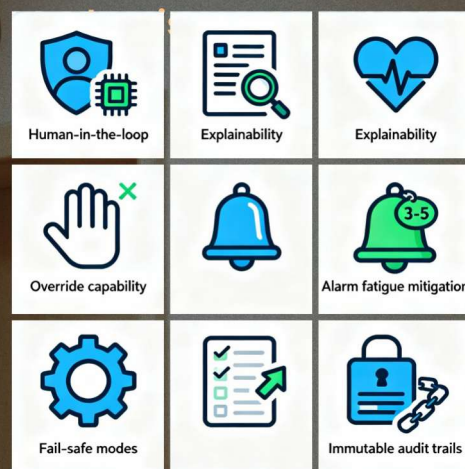
Methodology



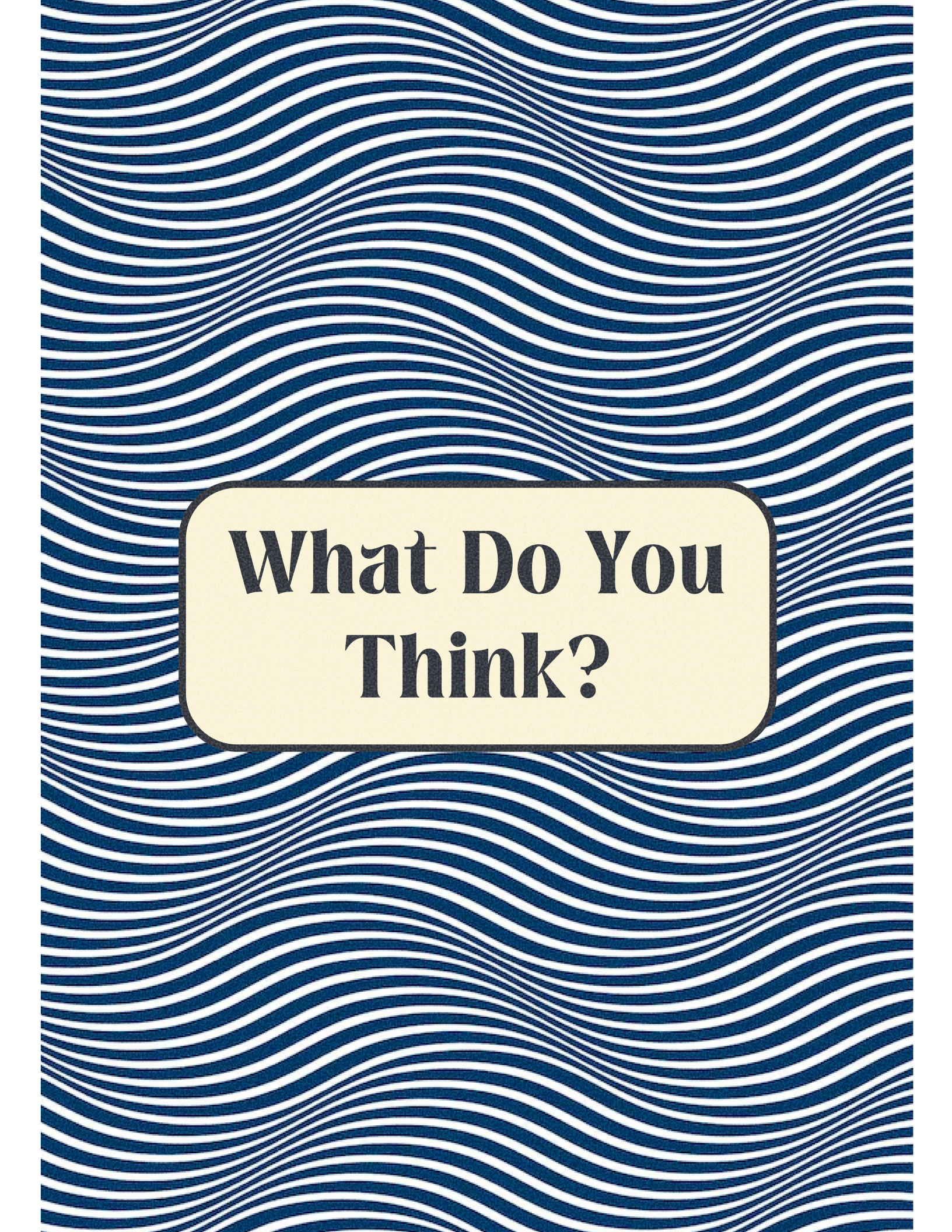
Result

- Reduce medication errors from 45.65% to <20%
- Decrease documentation time from 19–35% to <15% of shift hours
- Improve nurse-reported workload safety from 77.3% unsafe to <50%
- Reduce nurse burnout from 47% to <30%
- Lower nurse attrition from 25–30% annually to <20%
- Enhance patient monitoring frequency with critical vital sign alerts within 5–10 minutes

Safety



This solution transforms nurses from overloaded task-managers into empowered care providers, ultimately saving lives through prevention of medication errors, earlier deterioration detection, and sustainable workforce retention—all while maintaining strict regulatory compliance and ethical human-centered care principles



**What Do You
Think?**

Question: If you could freeze technology at one point in time, when would it be—and why?

The period just after the beginning of the internet would be the best time, in my opinion, to freeze technology because I like the possibility of thinking that I could build modern day technology from just the raw bare metals.

- Sahil Muhammed,
B230089CS

This might sound biased (obviously), but it would be the 1990s-2000s. This was the period where films and audio were consumed from CDs and phone through a landline. Flip phones then popped up. Since then, technology has progressed then, but I never felt the same ownership over them that I had back then. Anything that you consume over newer technology seems transitory, while at the same time, permanent over somewhere. The in-between period seems the perfect time when technology assisted without consuming us.

- Aadithya Varma, B220002EC

I would freeze technology around 2014–2018. To me, this period feels like the perfect balance between progress and authenticity. Technology was advanced enough to make life easier and communication smoother, it had not yet started replacing human effort and creativity. AI existed, but it stayed in the background. It helped people, instead of competing with them. When someone wrote, designed or created something, it usually felt real and it reflected their own thinking, struggles and growth. Social media felt more genuine. The internet felt less crowded with fake or auto-generated content. People focused more on improving their skills rather than depending on tools to do everything for them. That era encouraged curiosity, originality and personal effort. It allowed technology to support humans and not overshadow them. Freezing time there would mean keeping a world where innovation and authenticity still walked hand in hand.

- Ashly Skariah, B230029EC

I would freeze technology around 2007–2012, the sweet spot where we had modern convenience like smartphones, fast internet, and Google Maps, but hadn't yet entered the era of profusely addictive social media. Back then, the internet still felt like a tool and definitely not a lifestyle. People maintained a minimal online presence, but still valued an offline life; living in the present, not through posts, likes, and validation.

- Joshua Jacob Thomas, B250906CS

Question: What is your favourite memory involving an old piece of technology/software, and how did its limitations shape that experience?

My first pc was an experience I will never forget. At that time it was the peak of tech for me. But as I grew I realised the RAM it had was not even enough to do any memory intensive tasks. Also during that time using Google to complete your assignments and projects felt like having an unfair advantage over others. In some ways, it made me realise how great of an experience it was as well, as made it clear I had a lot to learn.

-Savio Shij, B251455CS

My favorite memory is sneaking in computer games and playing them on an old PC. A single webpage took minutes to load. The games were simple, slow, and sometimes crashed for no reason. Because of those limitations, every minute of playing felt extremely precious – teaching me to enjoy the moment before it disappeared.

-Nidhi Binu, B230075CS

One of my favourite memories was watching movies and cartoons on DVDs. I remember sitting in front of the television, watching movies like Independence Day and the Harry Potter series, completely absorbed. Although discs were finicky, there was a certain satisfaction in cleaning it carefully with a tissue (hoping it would run properly) and placing it into the DVD player. I remember being so fascinated by it and this will be one of the most fond memories of my childhood.

-Tarun Pradeep, B230098CS

My favourite memory is using 4G on early smartphones, where speed and data were limited compared to today. Those constraints made me value optimization on lightweight apps, space, storage. It shaped my appreciation for efficient system design and showed how much thoughtful engineering can achieve with limited resources.

-Mohit Kumar Agarwal, B220405CH

Yearbook
Batch of 2025

BATCH OF 2025

Aaryan Raj



aaryanraj1818@gmail.com

// College is 10% learning
and 90% figuring out how to
pass.

Abel Mani Roy



@abel.man.roy

// I don't recognise half
these people

Abhay Anantha



@_.char.lie._

// personQuote = nullptr

Abhijith Krishnanunni



abhijithkrishnanunnipzr@gmail.com

// personQuote = nullptr

BATCH OF 2025

Abijith R



@bonitoflakzs

// The silliest sorcerer in history ...

Ashwin S



@ashhwxn

// ... versus the silliest sorcerer of today

Adil Abdul Jabbar Chundakkadan



adiljabbar209@gmail.com

// personQuote = nullptr

Afra Seeyad



afraseeyad@gmail.com

// Now I'm one degree hotter

BATCH OF 2025

Afthab Hyder



afthabhydernm@gmail.com

// I Came, I Procrastinated,
I Graduated

Aiswarya V S



aiswaryaash05@gmail.com

// Trust me, I'm (almost) an
engineer!

Akhil Vijayan



akhilvijayan372@gmail.com

// Four years of BTech just to
realize smuggling was the real
startup idea all along.

Akshay C



akshayc2002@gmail.com

// Ofcourse talk to yourself,
sometimes you need expert advice.

BATCH OF 2025

Akshaykrishnan



@369_the_cuban_kid

// Life's too short for bad
vibes.. and expired snacks.
Choose wisely.

Albert T Alex



albathattam@gmail.com

// Know what you're worth to
others (friends, teachers,
companies) and act
accordingly

Aleena Mary George



liyakattikkanal@gmail.com

// The road goes ever on and
on

Ali Sahad



alisahadges@gmail.com

// This was due when? Oh.

BATCH OF 2025

Allamaneni Srikar



asrikar2004@gmail.com

// personQuote = nullptr

Allen Antony



allencheeramvelilcoyotte63@gmail.com

// When I came to college, here in my second semester, all I could think about was leaving as soon as possible. But now, in my final year, I find myself wishing I could stay just a little longer.

Anantha Padmanabhan K M



kma2709999@gmail.com

// Deadline to submit this form was in February. It's March. If that doesn't sum up my academic journey, I don't know what does.

Anil P



anilcair@gmail.com

// If campus life is all about cherishing memorable moments, NITC gifted me a treasure trove of them.

BATCH OF 2025

Ankesh Kumar



ankeshk834@gmail.com

// No

Anudeep S



anudeeps066@gmail.com

// For you, a thousand times over!

Anuj Suhas Haval



anuj.haval@gmail.com

// Pleasure unearned consumes itself

Anushka



anushka180304@gmail.com

// Gotta be my villain origin story

BATCH OF 2025

Ardra Gireesh



ardrasgkumar@gmail.com

// personQuote = nullptr

Ardra S Lal



ammuardra2002@gmail.com

// "Degree unlocked", my biggest flex is making it through without dropping out.

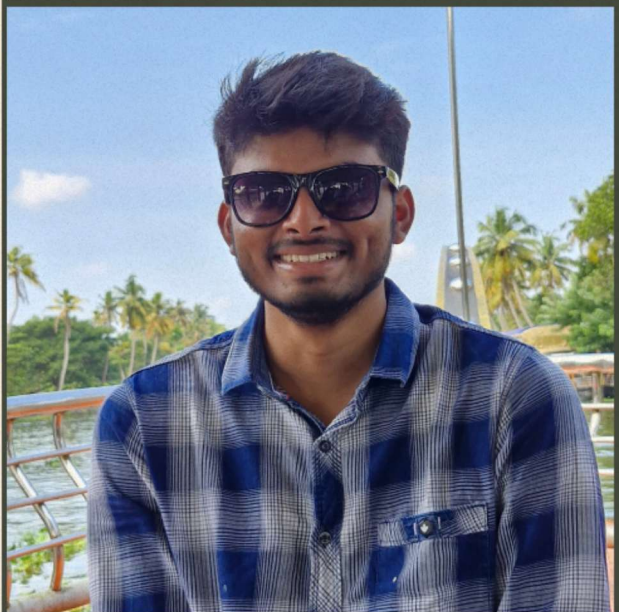
Arghya Ranjan Roy



arghyaroy1999@gmail.com

// Four incredible years at NITC! Grateful for the friendships, lessons, and memories. Proud to be a Bangladeshi CSE graduate from this amazing institution. I'll miss you boys

Arish Rathwa



arishrathwa45@gmail.com

// Too hard for vegetarians, બાકી તો મજા ની life.

BATCH OF 2025

Aritro Ghosh



aritro10@gmail.com

// I started college believing life was binary: either you win or lose. Turns out, it's more like qubits—a chaotic mix of possibilities.

Arjun Krishna M S



arjunkrishnams469@gmail.com

// You never know who is swimming naked until the tide goes down

Arnold Rebello



rebelloarnold8@gmail.com

// personQuote = nullptr

Arunima M



arunimamanoj09@gmail.com

// Too many unforgettable moments—guess I'll just leave a cliffhanger!

BATCH OF 2025

Aryan Rishikesh Sinha



aryanrishikesh128@gmail.com

// personQuote = nullptr

Abishek Nair



abisheknair54321@gmail.com

// Maybe the academic comeback was the friends we made along the way.

Avinash Kumar



avi200319@gmail.com

// See you next summer

Ayush Gautam



ayushgautam016@gmail.com

//At the moment I lifted the trophy, I felt that I did something for my college and I always be grateful for the college for giving me the opportunity of this.

BATCH OF 2025

Aditya Kumar



@adityak979

// personQuote = nullptr

Arshiya Hafis



@arshiyahafis

// "Dumbchild" - Arshiya 2021

Mohammed Ameen



[linkedin.com/in/mohammed-ameen-tsr](https://www.linkedin.com/in/mohammed-ameen-tsr)

// personQuote = nullptr

Naeem Niaz



@naeemisameme

// Go follow @da_gheera

BATCH OF 2025

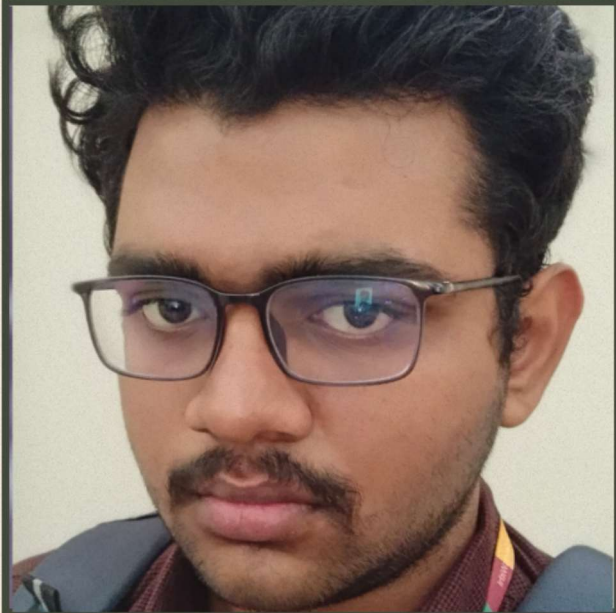
B Sai Narayana Koushik



koushikbypuri@gmail.com

// personQuote = nullptr

Beerakam Hemanth



hemanthbeerakam@gmail.com

// personQuote = nullptr

Bhaskar Pal



personSocial = nullptr

// I am lemon

Bhavana Peddayappagari



bhavanapban@gmail.com

// Lab assignment: the only thing that arrives faster than Amazon Prime Delivery. If my logic design assignment had a theme song, it would be "Highway to Hell"

BATCH OF 2025

Binshadh Basheer



binshadhbasheer@gmail.com

// It takes two weeks to know a person,
but it's been two years and I still have
no idea how mega hostel works

Bodireddy Gayathri



gayathribodireddy5@gmail.com

// Last-minute is my favorite time to do
everything.

Chandrakant V Bellary



chandrakantvb2003@gmail.com

// Yes, it's always hashmap. PS: ee sala
cup namde.

Chathala Sandeep



sandeepchathala007@gmail.com

// Everyday is not Sunday

BATCH OF 2025

Chinmay Krishnan K. C.



ckrishnan78@gmail.com

// I could stay at NITC for two more years and I'd still not know my way around MHB.

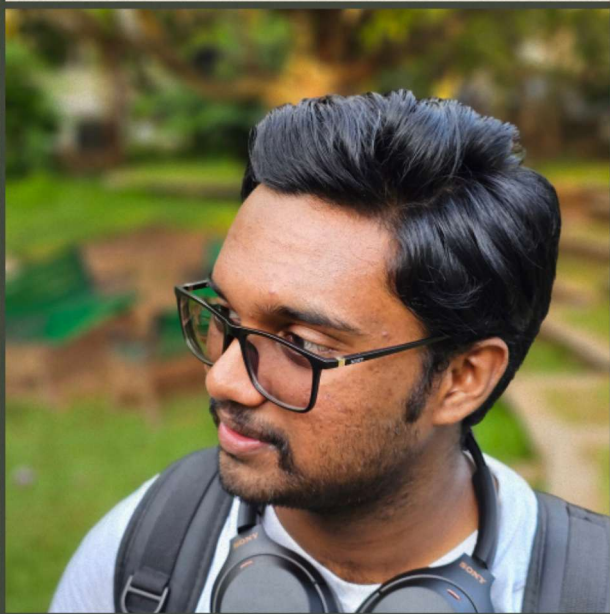
Deeraj U



deeraj_m230976cs@nitc.ac.in

// The greatest trick the "system" ever pulled was convincing you it's not rigged.

Diljith P D



diljith2003@gmail.com

// Error 418: I'm a teapot

G Krishna Nandini



krishnanandini43@gmail.com

// Trust your guts, ALWAYS

BATCH OF 2025

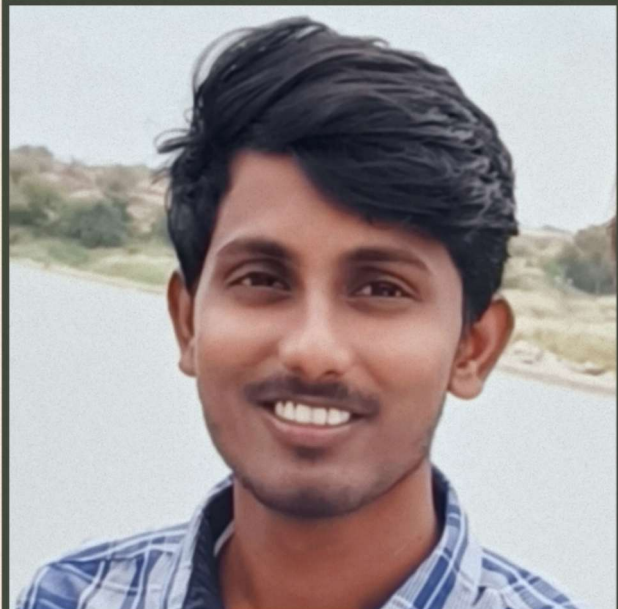
Gautham



gauthamsunil2004@gmail.com

// Spent more time on this quote than on my final year project

Gobburi Shiva



gobburishivaji0102@gmail.com

// A journey of growth, resilience and friendships, teaching me not just what to do, but also what not to do. Whatever you do in life, it's not legendary unless your friends are there to see it! Signed in with COVID, signing off with lifelong memories.

Gorle Hemanjali



hemanjaligorle@gmail.com

// 4 years of caffeine, labs, and vivas—finally, engineers! 🎓 Friends made it home, turning chaos into cherished moments. Thanks, NITC, for the madness and memories!

Habeeb Rahman



habeebmtb1@gmail.com

// personQuote = nullptr

BATCH OF 2025

Harikrishnan N



harikrishnannavath@gmail.com

// Completing college feels like
finishing a video game tutorial
after 18 years

Harish Kumar



sharishkumar192@gmail.com

// Weekdays don't define you;
weekends do. So, sleep in.

Janjoe Joy



janjoejoy@gmail.com

// personQuote = nullptr

Jayasurya Sunil



jsurya16491@gmail.com

// You either never start or you
never stop.

BATCH OF 2025

Joel Joseph



joel.joseph5803@gmail.com

```
// personQuote = nullptr
```

Johann B Simon



personSocial = nullptr

```
// personQuote = nullptr
```

Joseph



josephnirmal555@gmail.com

```
// We bonded in Arambol, Goa
```

K Tharian Thomas



tharian2003@gmail.com

```
// personQuote = nullptr
```


BATCH OF 2025

Kailas



`personSocial = nullptr`

// The world takes what it wants

Karan Sonkar



`ksjnva@gmail.com`

// From 'print("Hello, World!")' to 'echo "Goodbye, College!"'-executing adulthood.exe now. Wish me no runtime errors! 🚀🖥️

Krishna S



`krishnasreenivas1@gmail.com`

// 4 unforgettable years :))

Krishnendhu M A



`krishnendhu1002@gmail.com`

// Whatever happens, happens..

BATCH OF 2025

Kumar Gaurav



kg15navodayan@gmail.com

// If you're reading this, just know—I
once had a sleep schedule!

Lahin Saleem M P



lahinsaleem03@gmail.com

// personQuote = nullptr

Lakavath Akshay Kumar



lakavathakshaykumar2333@gmail.com

// personQuote = nullptr

Lay Shah



layshah07@gmail.com

// personQuote = nullptr

BATCH OF 2025

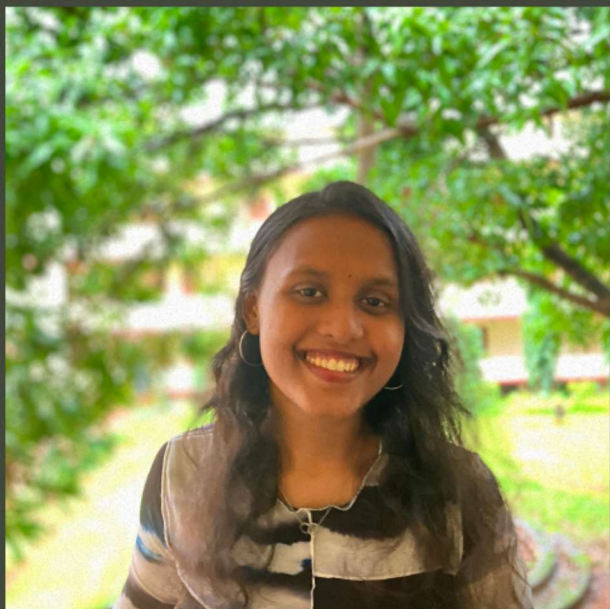
Leela Krishna Nimmalapudi



leelakrishnachowdary21171@gmail.com

// From trying to figure out weird stuff in OG Engineering Graphics to surviving core subs that hit us like a truck, it's been a wild ride. Assignments? Straight-up villains. No ChatGPT to save us—just caffeine, panic, and questionable decisions. Those 8 AM treks? More like morning torture, but we still made it. Mega nights? Chaos in the best way possible. Goa ('Industry Visit')? Zero work, all vibes. Here's to the chaos, the squad, and the memories we'll laugh about long after those 8 AM alarms (and still wondering why we agreed to those early classes)!

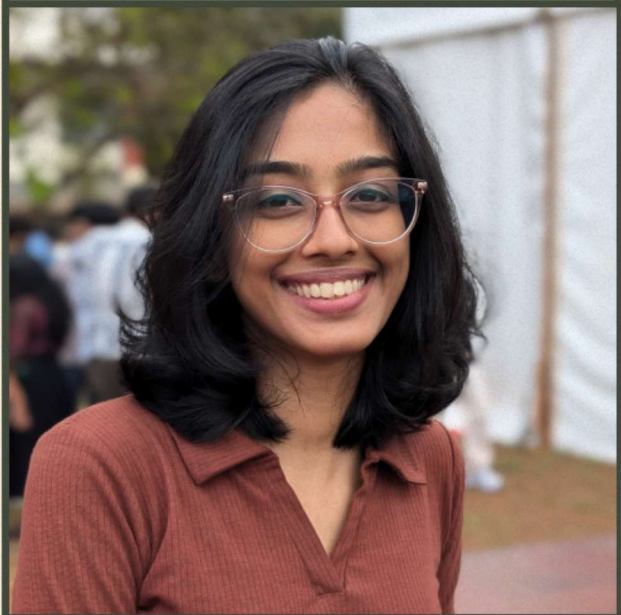
M. K. S. S. Mokshitha



saimokshitha2808@gmail.com

// Basically graduated in last minute studying and late night munching!! 📖🍷

Lekshmi Jyothish



lekshmi jyothish111@gmail.com

// College taught me that the solution to every problem is food... and if that doesn't work, try more food.

Mahadevan ur



mahadevanur@gmail.com

// The Office, season 7, episode 19, minute 14.45

BATCH OF 2025

Malla Tarun



tarunmalla2@gmail.com

// Four years of college, and my biggest accomplishment is this quote

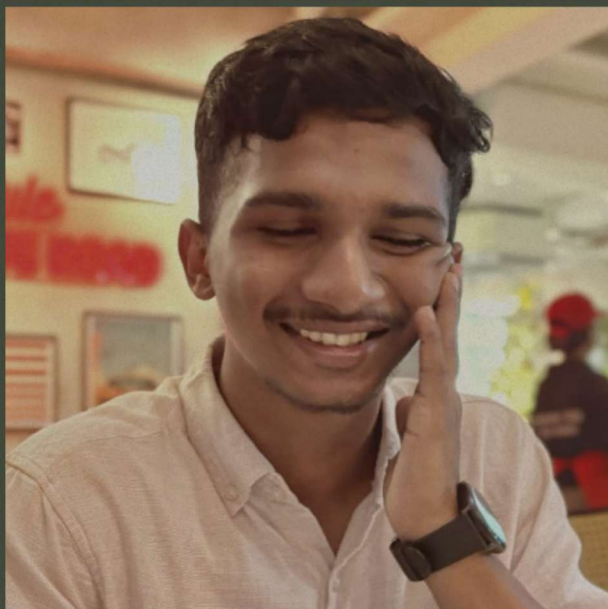
Maria John



mariajohnku@gmail.com

// I don't even have a pla

Mathew Bino



mathewmyid@gmail.com

// Today is the youngest you will ever be

Mathew George



@__maaman_

// Sometimes you win, sometimes you learn

BATCH OF 2025

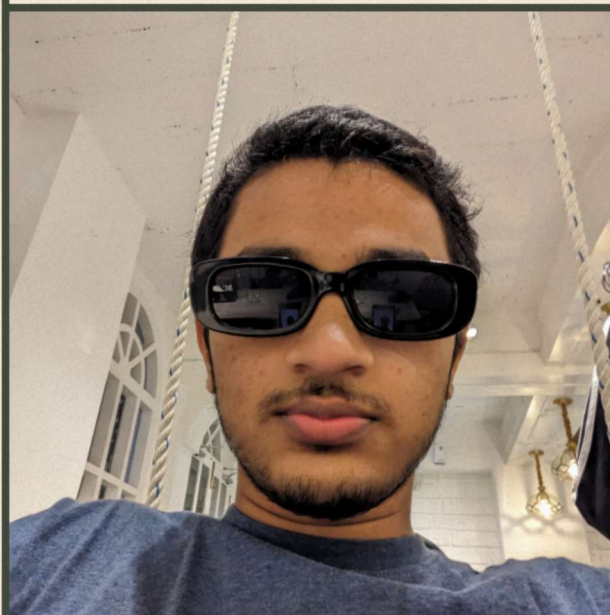
Mayank Gupta



www.linkedin.com/in/mayank-gupta-715210242/

// Trust me, your secrets are safer with me... mostly. 🤔 But hey, hit me up if you need the latest gossip! 🙄😏

Mazin Ibrahim



mazinnv11@gmail.com

// 🐼🐼🐼

Md Tahseen Raza



tahseenraza481@gmail.com

// Four years of late-night coding, last-minute submissions, and way too much chai. If you still see me in the lab... either I'm a legend or I messed up big time!

Mithunraj M



1313mithun@gmail.com

// My sleep schedule is like the WiFi in my hostel—unstable and unreliable.

BATCH OF 2025

Mohammad Saad



mosaad2707@icloud.com

// Zero-sum game? Life multiplies
rewards.

Nallaralla Abhiroop Reddy



abhiroop1289@gmail.com

// personQuote = nullptr

NANDANA DV



nandanadhanaseelan@gmail.com

// personQuote = nullptr

Nandana S Nair

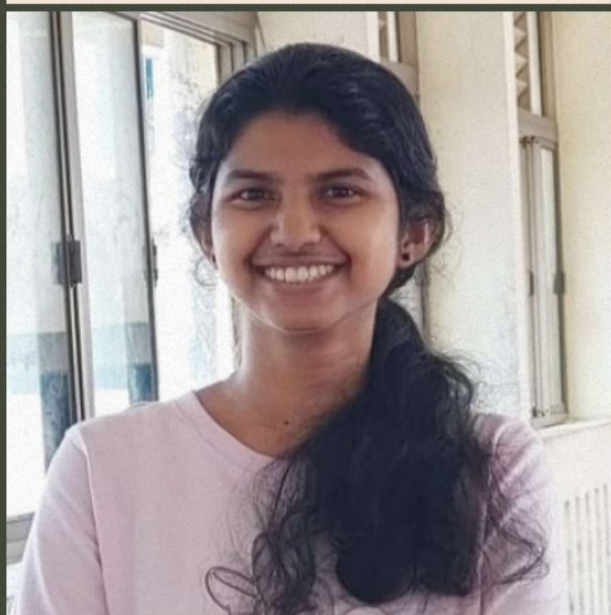


nandanasnair202002@gmail.com

// Some coded, some partied... I just
scrolled 🤔🤔

BATCH OF 2025

Nikhisha TS



nikishasuresh7@gmail.com

// More familiar with my room than the campus. Never stepped foot in Kozhikode, made a historic visit to Kattangal... once.😓😓

Ponnuru Aadarsh



v16ash@gmail.com

// It's been fun

Posimsetti Hemanth Venkata Sai



hsai19172@gmail.com

// It's been a wild ride—so many experiences, so much fun, and emotions hitting like a Bollywood climax 🎬! Be an all-rounder, so you don't look back with regrets after college 🎓. Don't be dead serious about anything—chill, have fun, and make these the most beautiful moments of your life!! All the best folks♥

Pranav Prashant



ipranavprashant@gmail.com

// Couldn't have found a better place to learn the Parkinson's Law 🤖

BATCH OF 2025

Pratibha Rawat



pratibharawat6991@gmail.com

Rahul B Menon



menonrahul2002@gmail.com

// Someone: What if I meet people who don't like me or the things I do!!? Me: You must walk your own path, Better to lose them than to lose yourself 😊. // I came, I saw, I survived... barely
Life is short live it like you don't have any other.

Rajalekshmi P Nair



rajipnair12345@gmail.com

Rajnish Baiju



rajneshbaiju@gmail.com

// Survived college, what's next?

// If your friend contacts you regarding an interesting internship opportunity in first year its proly a scam

BATCH OF 2025

Rakshith Pradeep Pagolu



rakshithpradeep1234@gmail.com

// Was busy doing nothing.

Ram Teja



ramteja7283@gmail.com

// 404 joke not found

Ranjeet Kumar



ranjeetkumar4261770@gmail.com

// Nothing in life is impossible as long as you take that first step.

Rilna Rejinold



@ril_naa_

// This due at 11:59 too?

BATCH OF 2025

Sam Joseph Francis



samjofrancis@gmail.com

// personQuote = nullptr

Sana C Mohamed



sanacmohd777@gmail.com

// May the bugs constantly annoy you.

Sanjay Rajakumar



sanjayrajakumar17@gmail.com

// Seek discomfort

Saurav S



mailtosauravs@gmail.com

// My love story is like Tathva'23 and Ragam'24. It never happened.

BATCH OF 2025

Serena Anthony



2003serio@gmail.com

// Live in the moment, don't think.
Everything may seem serious, but it
ain't.

Sesetti Kesav Radhakrishna



Kesavradhakrishna2003@gmail.com

// May your packets never collide,
your bandwidth always be high, and
your exams have fewer layers than
the OSI model. Good luck! 🚀😄

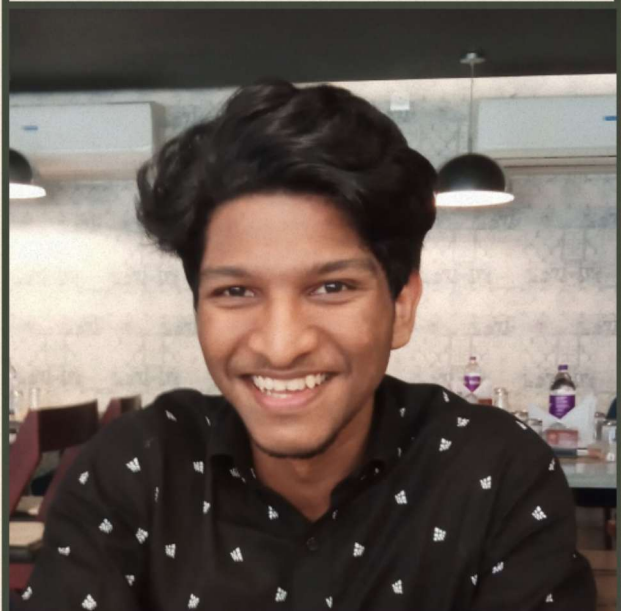
Shalin John Mathews



shalinjm03@gmail.com

// I turned pages and read minds –
both told great stories.

Shelly Anissa



shellyannissa29@gmail.com

// personQuote = nullptr

BATCH OF 2025

Shraddha Yelamarthu



personSocial = nullptr

// When life gives you lemonade, make
lemons

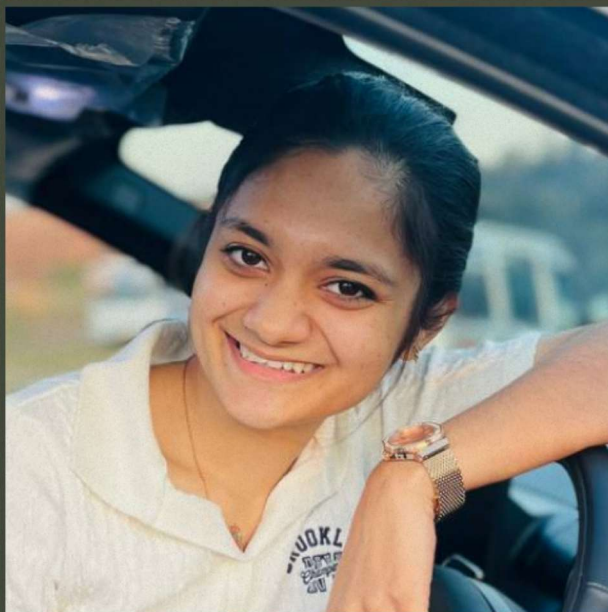
Shreya



shreya230303@gmail.com

// personQuote = nullptr

Shreyasi Saha



shreyasisaha16082003@gmail.com

// I can fix the world but they won't
give me the source code!!

Shubhangi Deep



shubhangideep99@gmail.com

// All's well that ends...wait, I have
student loans?

BATCH OF 2025

Siri Pagadala



siripagadala2003@gmail.com

// "Mama always said life was like a box of chocolates. You never know what you're gonna get." - Forrest Gump

Sita



sita.kumar789@gmail.com

// Procastinated this too, like every other assignment. Got tired thinking about it, searched pictures could not find any sane ones, thought about my life's purpose, gave up and submitted in last minute.

Sreeshma Sangesh



sreeshmasangesh@gmail.com

// Who would have thought college would be this dramatic!!

Srishti S



srshh1403@gmail.com

// personSocial = nullptr

BATCH OF 2025

Sritha Kalvagadda



Sritha0000@gmail.com

// Dear NITC, you were my toxic situationship. You drained me, kept me up at night, made me question my life choices... but in the end, I still liked you (kind of) 😊.

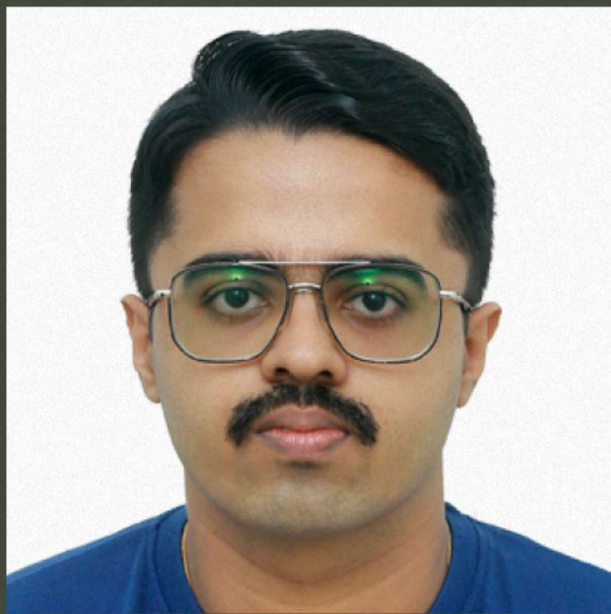
SSL



ssladmin@nitc.ac.in

// I'm supposed to be a lab but they treated me as a home, I see everything kids

Surag Sudhi



suragsudhi@gmail.com

// My computer screen is brighter than my future.

Tamarana Gnana Deekshitha



www.linkedin.com/in/deekshithatamarana

// Just one thing: Life will be easy and awesome if you change your perception of everything 😊

BATCH OF 2025

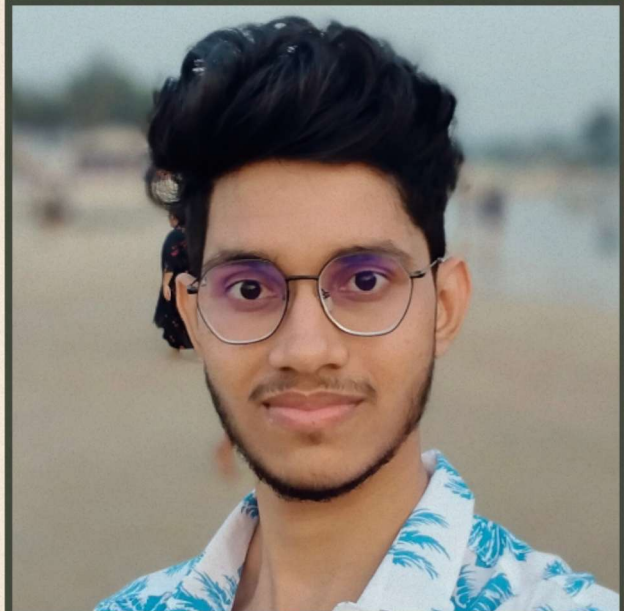
Tanishq Singh



siripagadala2003@gmail.com

// Don't take criticism from people
you wouldn't ask for advice.

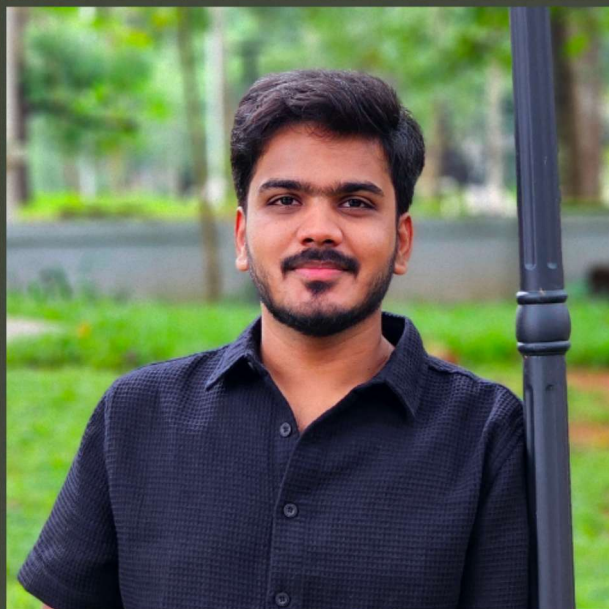
Teja Sri Harsha Ch



sita.kumar789@gmail.com

// I probably need to use Google
maps while I am with you, cause I
get lost from the world, when I am
with you

Uday Kiran Gedela



sreeshmasangesh@gmail.com

// Four years of lessons, laughter, and last-minute
chaos-reminders, submissions, and memories made
along the way. Grateful for every moment!

Utkarsh Kumar



srshh1403@gmail.com

// From the R to the S

BATCH OF 2025

V Krishna Deepak



krishnadeepak21.vkd@gmail.com

```
// personQuote = nullptr
```

Venkata Sai Vedurupaka



@venkatasai__24

```
// If the code works, don't touch it!
```

Vinayak V



vinayakvijayakumar2002@gmail.com

```
// personQuote = nullptr
```

Vivek



kpvivekvettam@gmail.com

```
// Four years, tons of memories,  
countless challenges, and one final  
exit(); Keep coding your future-bugs
```


BATCH OF 2025

Yadhu Krishnan T N



yadhukrishnantn@gmail.com

// End ~~X~~ Beginning ☒

Yajat Ponakampalli



yponakampalli@gmail.com

// Mugshot of man arrested for possessing upwards of 500 metric tons of swag.

Yash Choudhary



Yashc1607@gmail.com

// I made it! (Barely)

Yash Jain



yashjain9953@gmail.com

// I don't skate through life, David. I walk through life. In really nice shoes. - Alexis Rose

BATCH OF 2025

Yatin Sirohi



ysirohi25@gmail.com

// personQuote = nullptr

Yedla Mouli



mouliyedla789@gmail.com

// Thank you for countless experience,
memories signing off NIT Calicut

Yerraballi Yasaswini



yashaswini2715@gmail.com

// Spent four years learning how to
google and chatgpt better

Yeruva Rajagopal Reddy



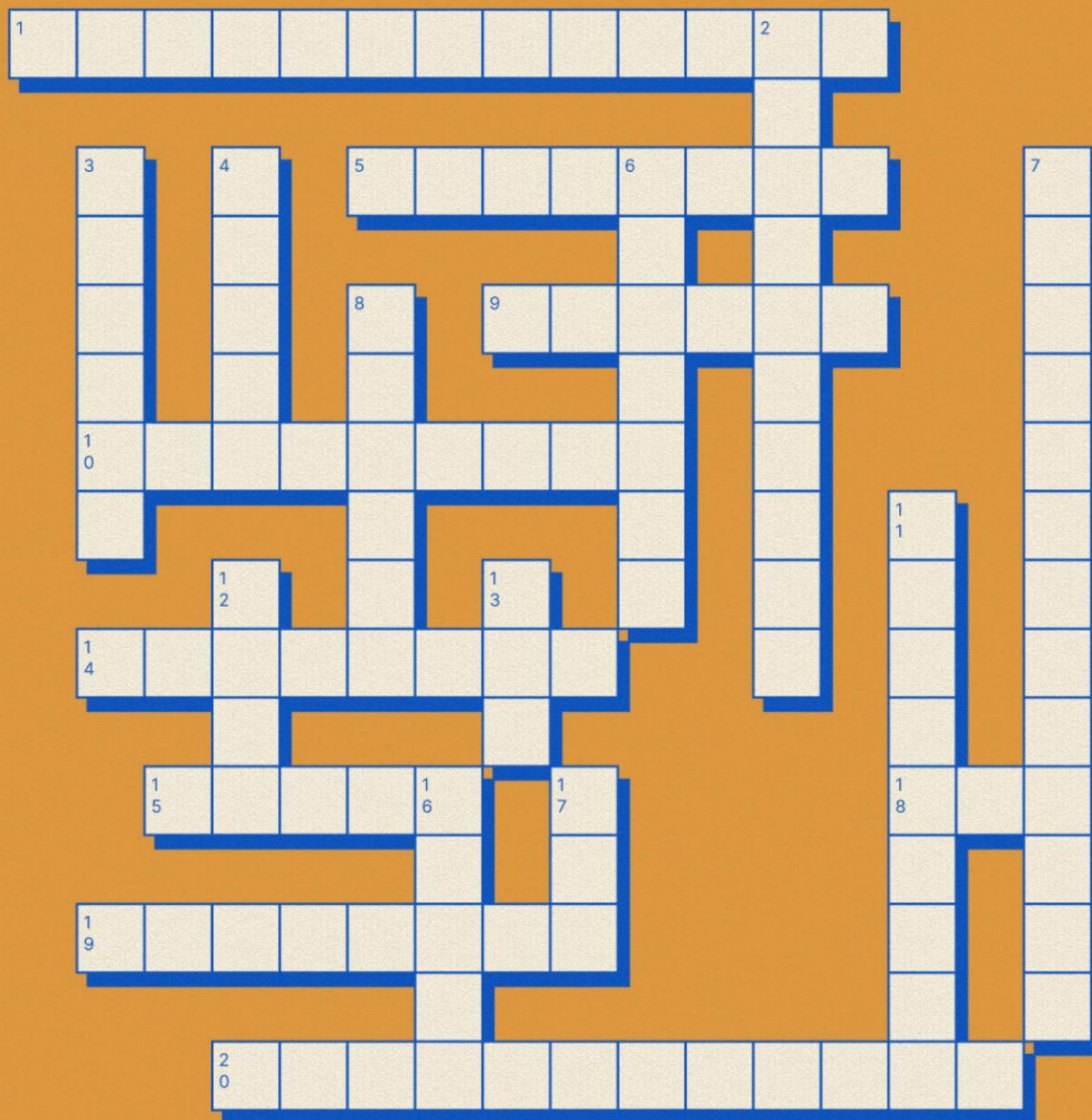
rajagopal.yeruva2004@gmail.com

// personQuote = nullptr

CROSSWORD

CROSSWORD

CROSSWORD



ACROSS

- 1** Mathematical model inspired by biological neural systems
- 5** Study of how nodes connect
- 9** Army of compromised machines
- 10** Calling itself to solve functions
- 14** Circular wait
- 15** Function input at call time
- 18** Interface hardware handling host network comms
- 19** DOS technique via traffic saturation
- 20** Single interface enabling multiple method resolutions

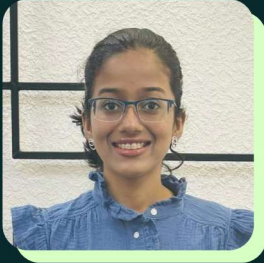
DOWN

- 2** Predicting continuous values
- 3** Community-driven Linux distribution sponsored by Red Hat
- 4** First general-purpose electronic computer
- 6** Delay in systems or networks
- 7** Created C
- 8** Core of an operating systems
- 11** Meaning of a program
- 12** A popular programming language
- 13** Largest computing society
- 16** India's IT policy ministry
- 17** Dependency graph where no node can reach itself again

KILLER KILLER KILLER KILLER SUDOKU

11	4		21		4	7	17	6	3	
6	14	17	9		6	14			1	
	2	28					14		9	
10	6		20	3		8	10	1		
			5	4		12	6	10		
14			4	5		1		23	9	8
2	12	1		17	7	9	4		9	17
12	7		3			14				
13	9	6		11	3	7				7

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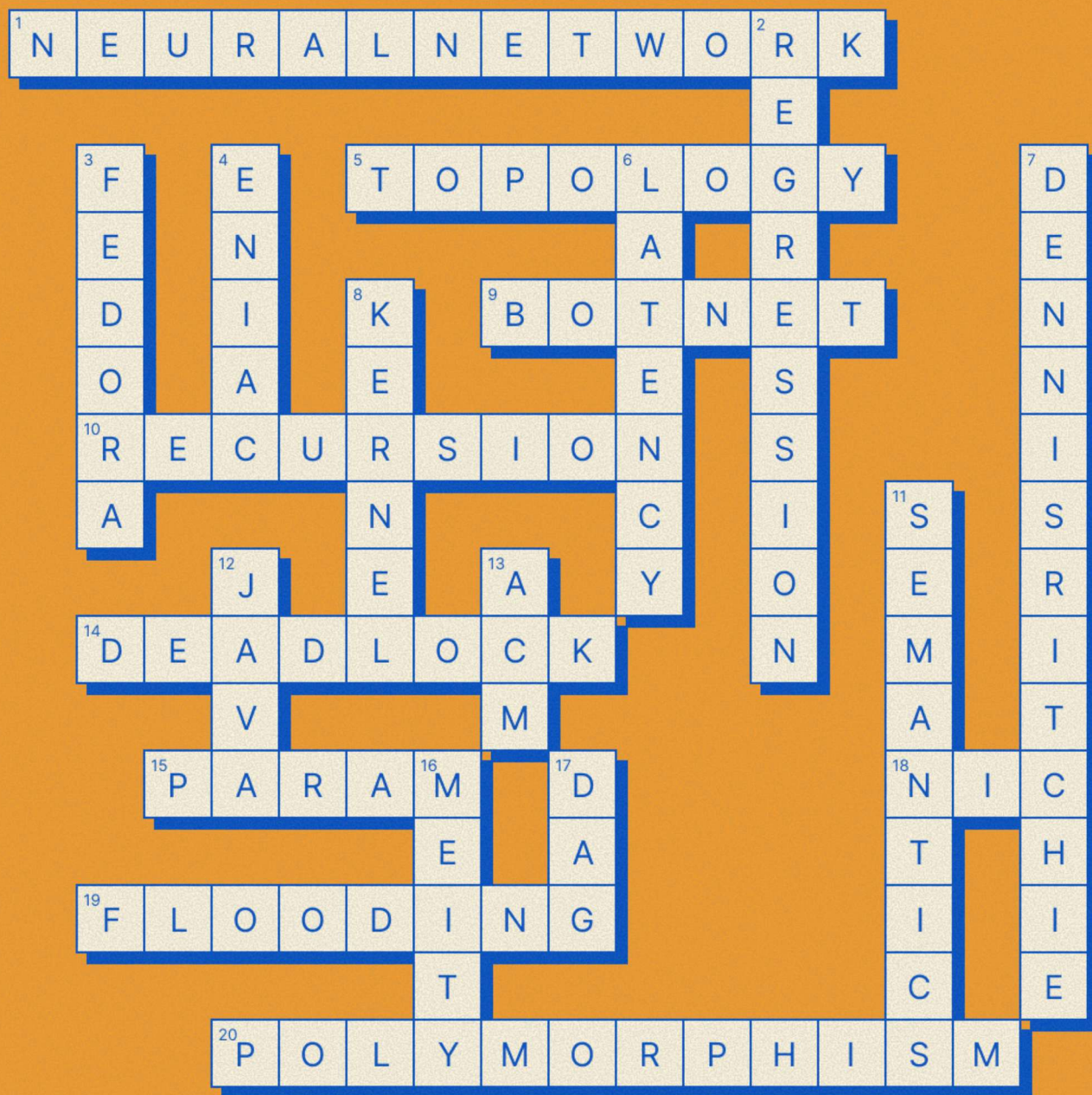
Visruth Mohandas

SOLUTION

CROSSWORD

CROSSWORD

CROSSWORD



SOLUTION

SUDOKU

SUDOKU

SUDOKU

SUDOKU

¹¹ 5	⁴ 3	1	²¹ 9	8	4	⁷ 7	¹⁷ 6	³ 2
6	¹⁴ 4	¹⁷ 9	2	⁶ 5	¹⁴ 7	3	8	1
8	2	²⁸ 7	6	1	3	4	¹⁴ 5	9
¹⁰ 9	6	2	²⁰ 3	7	8	¹⁰ 1	4	5
1	8	5	¹⁵ 4	2	¹² 9	⁶ 6	¹⁰ 7	3
¹⁴ 3	7	4	5	6	1	2	²³ 9	8
² 2	¹² 1	8	¹⁷ 7	⁹ 4	5	⁹ 9	¹⁷ 3	6
¹² 7	5	3	1	9	¹⁴ 6	8	2	4
¹³ 4	9	⁶ 6	¹¹ 8	3	⁷ 2	5	1	7