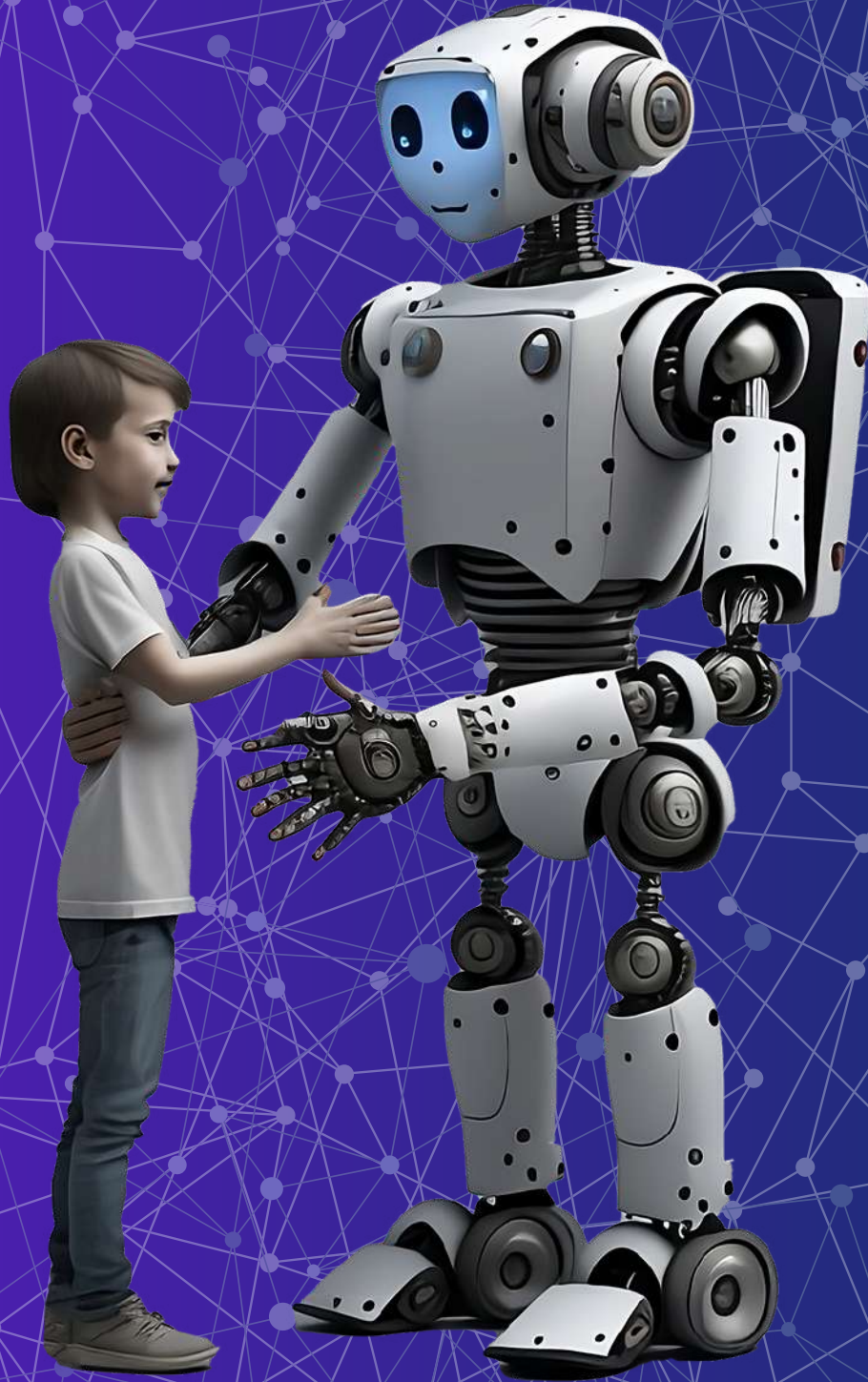


CIE NEWSLETTER

Future Forge: AI, Entrepreneurship and Your Potential



Issue-8

October 2023



**FUTURE FORGE: AI,
ENTREPRENEURSHIP
AND YOUR POTENTIAL**

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FOREWORD BY

DR M R DORESWAMY

{CHANCELLOR, PES UNIVERSITY}

Writing the Foreword to PES University's Centre for Innovation and Entrepreneurship (CIE) newsletter gives me great pleasure, especially as PES institution has crossed the 50-year milestone with CIE completing five years.

PES University, situated in Bangalore, India, is one of the country's leading teaching and research universities. PES University is part of the People's Education Society (PES) Group of Institutions, where innovation and entrepreneurship have been the way of life from inception. PES had its humble beginnings with 40 students in a rented gym and has come a long way in 50 years with 20,000+ students in more than 20 disciplines. This can be attributed to PES University's core values of perseverance, excellence, and service combined with a penchant for innovation in education.

Innovation inevitably means change. Driving significant change is challenging and requires courage, a dogged pursuit of the vision, crafting and implementing strategy, and rallying people to achieve the objectives. I want to give examples from the journey we have undertaken at PES.

Having pioneered the implementation of ISO 9002 at PES Institute of Technology, the first engineering college in Southeast Asia to receive this prestigious certification, and being invited to the USA as a Fulbright Scholar to study their higher education programs, I laid a strong foundation that supports the 20 institutions under the PES banner today. As a Member of the Legislative Council and Advisor to the Chief Minister of Karnataka, I guided several impactful educational reforms. Such endeavors, pursued over an extended period, have fortified the institution's pillars and led PES University to be where we are today.



We established the Centre for Innovation and Entrepreneurship (CIE) at PES University to serve as a platform to inspire students to develop innovative ideas, positively impact the world, and empower them to become exemplary entrepreneurs and professionals. To achieve this, we have brought together diverse academic disciplines and stakeholders, coupled human and financial resources, nurtured creative energy, and cultivated a spirit of perseverance and risk-taking. We have designed a new organization to maximize our chances of achieving this bold and ambitious goal. We envision CIE as a platform where, guided by ethics and integrity, technology, innovation, and entrepreneurship converge to motivate students to embrace an empowering mindset as they embark on a journey of innovation and entrepreneurship.

FOREWORD BY DR M R DORESWAMY {CHANCELLOR, PES UNIVERSITY}

In the past five years, CIE has had a profound impact, touching the lives of 2,000 students. We have introduced six new courses, empowered students to win national and international awards, and fostered collaborations with industry for technological research and innovation, resulting in publications at top conferences. We have contributed to research in innovation and entrepreneurship, simultaneously opening up new career opportunities in startups and established firms.

In the age of Generative AI, Quantum computing, and Industry 5.0, students must acquire new skills to leverage these remarkable capabilities for the betterment of society. This requires students to not only master engineering and technology skills but also develop and refine skills related to critical thinking, creativity, communication, and collaboration. To realize the full potential of these breakthrough technologies for the benefit of society, we must transcend technology and business and ensure that human values, ethics, and integrity are at the heart of the next generation of innovative products and solutions.

I wish CIE the best as it continues its journey to inspire, encourage, and enable students to 'navigate in the real world' by embracing innovation and entrepreneurship.



DIRECTOR'S DESK

BY PROF. SATHYA PRASAD

The quote “May you live in interesting times” takes on a significantly different meaning now – it’s been a year since OpenAI threw open ChatGPT, the first instance of a powerful artificial intelligence (AI) model that is readily available and accessible for general-purpose and commercial use. A novice computer user can create a customized resume, craft original jokes, write music in any genre, write code, and more!

Welcome to the world of General AI (GAI) and more! This is the 8th issue of the CIE Newsletter and is focused on AI and what this may mean for innovation and entrepreneurship. In this issue, we are also honoured to have the Chancellor of PES University write the Foreword for this newsletter.



Just like how the advent of cloud computing and SaaS (software-as-a-service) democratized the setting up of startups, AI is here to disrupt how founders will bring new ideas into this world. In the words of Steve Blank, who helped popularize lean startup: “In 12 months, it’s going to be a very different way of starting a company”. A recent Wall Street Journal article envisaged some of the ways AI will shake up entrepreneurship: generating ideas, surveying competition, testing the concept, creating the business pitch, market research, and more.

To illustrate the use of GenAI, I asked DALL-E3 to create an image with the following prompt “Poster for generative AI including the words innovation and entrepreneurship”.

AI and Generative AI will also have a broader impact on several enterprise functions ranging from Strategy, Finance, Supply Chain Management, Human Resources, Marketing and Sales, Product/Service Development, Service Operations, Manufacturing, and more.



AI will also likely alter employment opportunities and skilling – consider the following based on a global survey by Coursera: 85 million jobs will be replaced by automation by 2025 and 40% of core skills are anticipated to change for workers while on the flip side, 150 million new technology-oriented jobs are expected and 69% of the companies globally will report a shortage of talent in the same period.

AI is not without risks and includes concerns around inaccuracy, cybersecurity, intellectual property infringement, regulatory compliance, explainability, etc. More attention will be required to educate and train students to use AI responsibly.

DIRECTOR'S DESK BY PROF. SATHYA PRASAD

Several skills will be more critical than ever in this new era where machines can outperform humans. These skills, which we weave into CIE courses and activities like critical thinking, creative problem solving, self-management, working with people, and communication become important in addition to core literacies, and technology. Taking note of this, we started the 'CIE Aarambh' program with Harvard ManageMentor to help students learn these important skills and gain credentials that can help them in getting internships and placements.

At CIE, we continue to experiment with new ways of combining learning and practice and helping bring the best of academia and industry. This resulted in a pilot called 'Capstone Project with Industry Partner' (CPIP), a platform for industry/startups to source real-world challenge statements that can be taken up as a B.Tech capstone project by students working under the supervision of Faculty. We are pleased to share that the results are encouraging leading to the CPIP platform being offered in 2024 as well.

As 2023 draws to a close, we are grateful for the support from the ecosystem (startup/industry/academia) and the students' trust and engagement. If you wish to collaborate on research and innovation in a university setting, please contact CIE @ PES University.

CIE at PESU (2018-23)



www.cie.pes.edu

From all of us in CIE @ PES University, we wish you a wonderful year in 2024!

CIE SUMMER WORKSHOP 2023

In an exhilarating 8-week journey, CIE at PES University orchestrated a remarkable summer program, nurturing innovation and entrepreneurial spirit among 60 dynamic students. With 15 captivating projects, industry partnerships, and enlightening seminars, CIE's workshops became the hub of skill development.

From mastering Raspberry Pi's microcontrollers to exploring the world of edge computing with DE10 Nano, participants were immersed in hands-on learning. The FPGA Development workshop unlocked digital design's intricacies, and the Teardown Challenge ignited inventive thinking.

In 30 intensive hours, Machine Learning enthusiasts delved into Python, while the Prototyping Workshop honed their design thinking. CIE's Internship Program and Demo Day were the grand finale, unveiling projects that pushed the boundaries of Machine Learning, AgroTech, and Robotics.

Guided by 15 dedicated student mentors and industry experts, these brilliant interns embarked on a transformative journey. Their projects showcased the potential to revolutionize agriculture, harnessing IoT and smart sensors, and unveiled the limitless possibilities of technological advancement through FPGA-based hardware acceleration.

CIE's summer workshop is a testament to fostering innovation and empowering the next generation of change-makers.



CAPSTONE PROJECT WITH INDUSTRY PARTNER 2023 (CPIP):

In a new initiative, the university's Capstone Project with Industry Partner (CPIP) program is transforming B.Tech capstone projects (taken up by students in their 3rd and 4th years). This collaborative endeavor brought together seven teams, each tasked with solving one of seven diverse problem statements presented by industry leaders like EOX Vantage, Pcloudy and SVAIM.AI.

Throughout three intensive semesters, students receive invaluable guidance and mentorship from both their industrial partners and dedicated faculty members. This fusion of academia and industry expertise culminates in exceptional project outcomes, benefiting all stakeholders involved.

One standout challenge involves developing a deep learning-based neural network to accurately detect fractures in X-rays and CT images. Another focuses on creating an AI-driven recommendation engine for device matrix optimization. These real-world applications not only showcase students' skills but also drive innovation in operational intelligence, container security, and more.

The CPIP program's success lies in its ability to forge meaningful connections between academia and industry, ultimately enhancing the quality and impact of student projects. With its transformative potential, CPIP exemplifies the future of collaborative education and innovation.



CISCO THINGQBATOR

Cisco ThingQbator is a CSR initiative of Cisco in partnership with NASSCOM Foundation, addressing social challenges through technology. It promotes a maker culture in universities, empowering students to develop innovative solutions and fostering entrepreneurship with mentoring and financial support. In a competition featuring 900-1000 teams from across India, PES University has emerged as a shining beacon of creativity and entrepreneurship. Five out of the top ten teams that secured seed funding of Rs 5,00,000 each were from PES University.

Five Out of the Top Ten: A Triumph of Innovation



PocketCoach

PocketCoach is reshaping sports with three phases: Learn, Practice, Compete. They enlist top coaches for structured training, employ AI driven Playl software for engaging drills, and streamline local tournaments with user-friendly features. Their mission is to democratize sports and empower all athletes.

OneSpace

OneSpace is a lifeline for parents of special needs children in India. It connects autistic kids with specialized therapists and fosters collaboration between paediatricians and therapists. With a mission to provide early intervention and support, it's a beacon of hope for the autism community.



Vanadootha

Vanadootha, The Messenger of the Forest, dedicated to nature. Their flagship product, Kshavi, addresses human-animal conflicts, protecting farmlands and supporting India's farming community. They're poised to make a lasting impact in restoring harmony between humans and wildlife.



CISCO THINGQBATOR



Project Roots

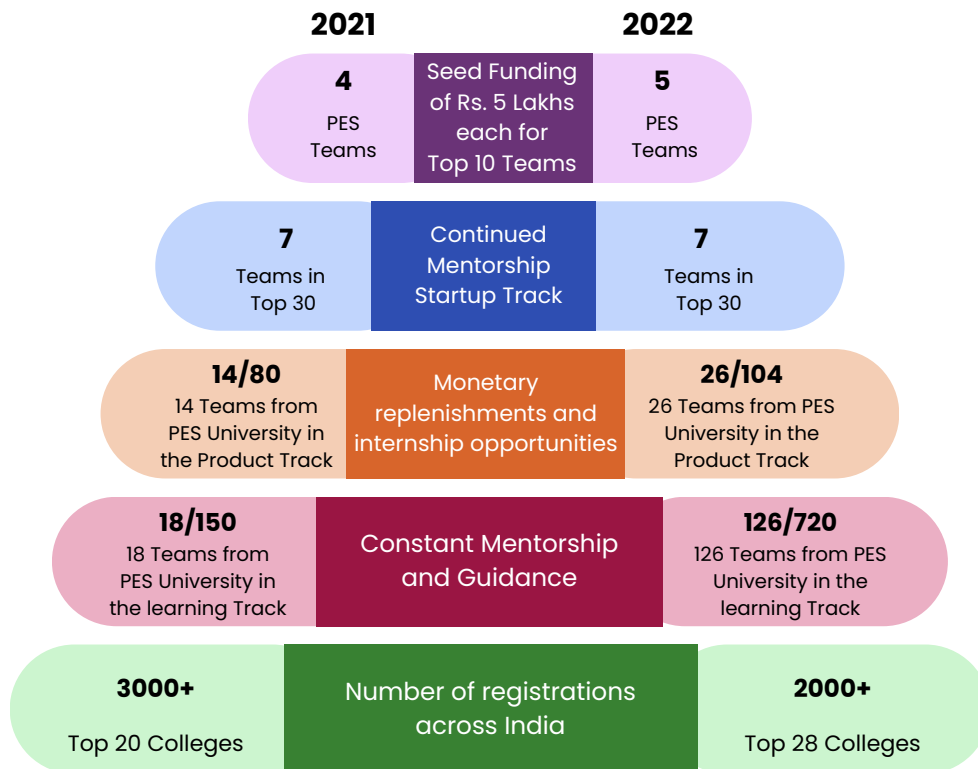
Project Roots innovatively fights dementia with personalized cognitive games. Tailored to each patient, it uses neurological-based techniques to slow progression. The app facilitates seamless connectivity between doctors, patients, and caregivers for enhanced cognitive health in senior citizens.

CAPA

CAPA, a healthcare startup, addresses India's anemia problem with affordability and holistic solutions. They empower women with personalized guidance, yoga, meditation, doctor consultations, and local diets for a healthier future.



PES University and CIE remain dedicated to empowering the next generation of innovators and entrepreneurs. Let's continue to dream big, innovate relentlessly, and make a lasting impact on the world.



CIE AARAMBH

Aarambh 2023, the highly anticipated mentorship program, Harvard Manage Mentor(HMM), kicked off with great enthusiasm and optimism on August 26th, 2023. This program, designed to empower individuals in their personal and professional lives, focuses on various aspects such as goal setting, change management, strategic thinking, presentation skills and personal development.

Goals and Objectives:

The central theme of Aarambh 2023 revolves around goal setting and strategization. The course is structured to help participants identify and set clear, achievable goals in both their personal and professional lives. These goals encompass a wide range of aspirations, from career advancements to personal growth, and even contributions to society. The program aims to instill in its participants the ability to define their objectives and create a roadmap to achieve them.

Curriculum:

Aarambh 2023 boasts a comprehensive curriculum that covers a diverse range of topics and skills necessary for personal and professional development. Some of the key modules include:

- Goal setting
- Change Management
- Innovation and Creativity
- Strategic Thinking
- Sharpening your Business Acumen
- Presentation skills

Highlights of the In-person Cafe Session:

One of the standout events within Aarambh 2023 was an in-person cafe session led by

Ms. Usha Raghunath. This session brought together participants for a dynamic and interactive experience, providing an opportunity to apply the principles they had learned in the course.

Ms. Usha Raghunath's expertise and engaging style facilitated interactive discussions on goal setting and strategization. Participants were encouraged to share their goals and challenges, fostering a sense of community.

Ms. Usha Raghunath shared real-life examples of individuals who had successfully achieved their goals through effective strategization. These stories inspired participants and demonstrated the practical application of the course concepts. Participants received personalized guidance on refining their goals.



PES INNOVATION LABS

PES Innovation Labs, a pioneering Center of Excellence in the field of innovation and technology, has been making waves with its unique approach to internships and mentorship programs. This center is spearheaded by Prof. Rajasekhar and Dr. Venkatarangan

At the heart of PES Innovation Labs is their commitment to offering internships to first and second-year students who often struggle to secure internships elsewhere. Recognizing the importance of exposure and hands-on experience, the lab aims to bridge the gap by providing unparalleled opportunities to these budding talents.

This year, the Lab has provided support for a range of innovative projects, including the development of a legged-wheeled robot capable of integrating reinforcement learning to navigate diverse terrains. Additionally, there has been a project focused on utilizing signal processing techniques to implement audio Trojans and echo hiding. The Lab has worked on applying reinforcement learning to solve traffic issues on a city-wide scale. There has also been a project involving a robotic system with learning capabilities and cloud integration that has successfully automated and optimized warehouse operations.

A standout feature of the lab is its dynamic mentorship program. Mentors, who are accomplished alumni of the lab, play a pivotal role in shaping the learning experience for interns. They take the time to identify the best problem statements and hand them over to the interns, ensuring that they receive the utmost exposure and growth opportunities

One of the highlights of PES Innovation Labs is their flagship event, Hash Code. This hackathon, which was PES University's first, brings together brilliant minds from diverse backgrounds to collaborate and solve real-world problems.

PES Innovation Labs has a unique charm that sets it apart. The historical value and the opportunity to leave a lasting mark are what make the lab so cherished. It's all about embracing the legacy and creating an environment where innovation thrives.



PES ECELL: E3

PES Entrepreneurship Cell (ECell) is a student-run organization that challenges the perception of entrepreneurship, viewing it as an intrinsic part of everyday life, often overlooked. In an era where "entrepreneurship" is the buzzword, ECell goes beyond conventional notions. It's a hub for self-discovery, a catalyst for driving positive change within our community. ECell aims to foster the belief that everyone has the potential to be self-made, offering a fresh perspective on what it means to be an entrepreneur.

In March, ECell hosted E³, a dynamic event comprising three key phases. The day commenced with an enlightening session led by Samyukta Mahesh, a notable ECell alum and former President. Her insights on resume crafting and mastering interviews set the stage for a day filled with inspiration and learning. During her session, Samyukta emphasised the importance of simplicity and clarity in resumes, that a well-organized resume enables recruiters to quickly assess a candidate's qualifications, underlining the document's crucial role in the job search process.

The event then transitioned to an engaging afternoon session, where students took on the roles of corporate executives, tackling various corporate crises. Their challenge was to make critical decisions guiding their companies through these challenging scenarios, promoting exceptional crisis management skills. In the event's grand finale, participants tapped into their creativity, designing innovative concepts for a new CIE (Center for Innovation and Entrepreneurship) space. This space was divided into zones, and auctioned using a unique currency—time, creating spirited bidding wars.

Building on E³'s success, ECell is now preparing for the Intracell Tech Venture this semester, fostering tech-oriented solutions to real-world problems. This venture promises an exhilarating journey, fostering collaboration and creativity where teams will harness their skills and knowledge to devise innovative solutions, setting the stage for potential real-world applications. This initiative exemplifies our commitment to nurturing entrepreneurial spirit and driving technological innovation.



ENTREPRENEURSHIP CLUB : SHE-SUMMIT

As part of International Women 's Day celebrations, the Entrepreneurship Club, PESU EC Campus hosted The SHE-Summit, where we had an open panel discussion with five incredible entrepreneurs and C-suite executives followed by an idea challenge competition with the theme of women empowerment.

Our guests of honour included Hena Mehta, Co-founder-CEO of Basis; Deepa Damodaran, Founder of The Trycle; Madhavi Shankar, Co-founder-CEO of SpaceBasic; Sakshi Mithal, Founder-CEO of TKC Foods and Shalini Kapoor, Chief Technologist in Public Sector at Amazon Web Services.

Having such distinguished guests as part of the celebrations was truly remarkable. The panel discussion touched upon various aspects of women's leadership in the business world, addressing challenges, triumphs, and the path to breaking through the glass ceiling. The panelists, through their career stories and experiences, shared invaluable learnings about resilience, adaptability and the willingness to challenge conventional norms.

The panel discussion was followed by an idea challenge where the participants presented innovative ideas to solve problems faced by women on a day to day basis. Some standouts were the use of AI for bias free hiring, distributing sanitary pads for free using the packaging as ad-space, connecting homemakers to college students for providing fresh-cooked meals and identifying and verifying washrooms on highways.

Additionally, we were happy to partner with Growth School as an education partner who sponsored courses to all the 30 participants!

The She Summit event served as a powerful reminder of the immense potential of women in leadership roles and entrepreneurship and truly left us inspired!



CIE INTERNS



CIE INTERNS



CIE ALUMNI

Dhruv Shetty: Entrepreneurial Journey from CIE to CEI

Dhruv Shetty's entrepreneurial journey commenced at PES University, where he quickly became part of the Entrepreneurship Cell (ECell), introducing him to the Center for Innovation and Entrepreneurship (CIE). Dhruv's passion for entrepreneurship dates back to 7th grade, where he first ventured into business with origami. Later, with fellow student Aditeya Baral at CMR High School, they launched 'Rubble', an innovative app revolutionizing citywide garbage collection.

Under the guidance of Devashish Vaishnav and Abhishek Reddy, Dhruv's journey within ECell was nothing short of remarkable. From a curious member, he ascended to the Head of Marketing, ultimately becoming the ECell President by his third year. This experience deepened his connection with CIE, with Professor Sathya and Madhukar Sir playing pivotal roles in Dhruv's personal and professional growth.



Signature events, such as the 'Decypher' hackathon, provided Dhruv hands-on experience in orchestrating, managing, and leading large-scale events. In his fourth year, his collaboration with CIE led to the creation of 'Learn N Fun', a gamified learning platform for CIE courses, showcasing Dhruv's seamless integration of education and entrepreneurship.

In the midst of academic and extracurricular pursuits, 2020 brought about a turning point: the birth of Pyramid Developers. What began as a personal endeavor soon gained momentum, blossoming into a team of 30 dedicated individuals. Today, Pyramid Developers boasts a dynamic team of developers, designers, project managers, and an executive committee, with a portfolio of over 35 completed projects.

Transitioning to New York University's Computing, Entrepreneurship, and Innovation (CEI) program was a natural progression for Dhruv, with Prof. Sathya playing a pivotal role in his acceptance. While immersed in the vibrant culture of New York City and NYU, the foundational influence of CIE remains integral to Dhruv's endeavours. As he approaches graduation in December, he carries forward the lessons and values instilled by CIE, harmonizing his PES roots with the vibrant energy of NYU.



Dhruv Shetty's journey from PES to NYU is a fusion of two worlds, propelled by his fervent commitment to shaping a future steeped in entrepreneurial excellence. His story is an inspiration to aspiring entrepreneurs and a testament to the transformative power of education and innovation.

PECON'23

The People's Conference (PeCon) is the annual Model United Nations (MUN) hosted by the PES MUN Society, RR Campus. PeCon was conducted on the 7th and 8th of October, 2023.

In the lead-up to an MUN, prospective delegates are encouraged to learn and research the committee agenda as well as their assigned portfolio.

In PeCon, participants were tasked to make detailed and impactful speeches on the agenda. They must be relevant and add to the complex conversation of complex issues. Speeches should detail the agenda and dovetail meaningful solutions.

Documentation is a pivotal aspect of MUNs. PeCon emphasises the significance of documentation - an essential aspect in academia and entrepreneurship. It takes the form of working papers, draft resolutions, crisis directives and articles. Syntax, originality, and clarity are the vital criteria for this. Harking back to AI, it is one of the most hotly researched fields. MUNs prepare participants to pen and present well-researched content, regardless of their domain of research.

Resourcefulness and quick thinking are rigorously tested in MUNs.

In summation, PeCon is the ideal crucible for the learning and growth of every student, where they can forge their path towards excellence.



SIT DOWN WITH MANOJ SANKER

Pioneering Innovation from PES University to Nemocare

Meet Manoj Sanker, a visionary entrepreneur and PES University alumni. He ventured beyond traditional career paths, setting the stage for his entrepreneurial voyage. As the Co-Founder of NemoCare, Manoj pioneers transformative healthcare technology. With a focus on Smart Wearables and IoT, Manoj leads the development of life-saving technologies that will transform the way healthcare is delivered. NemoCare aims to revolutionize newborn care with its innovative, affordable, accessible and highly accurate monitoring solutions for the emerging markets. NemoCare's flagship product, "Nemocare Raksha" is a first of its kind IoT enabled medical grade wearable for new born



babies backed by an AI engine that monitors 6 key vital signs, identifies and pre-emptively predicts critical distress conditions and gives a complete picture of the baby's health.

Q: Entrepreneurship often entails risks. What advice do you have for students contemplating this path?

A: While risks are inherent, the driving force, be it vision or passion must outweigh uncertainties. Conviction in your vision is paramount. The entrepreneurial landscape today offers a supportive ecosystem, with curated student funds and incubation centres providing invaluable resources.

Q: In the startup landscape, what core skills do you find indispensable?

A: Distinctive skill sets are vital. Industry workshops offer exposure, while structured learning and mentorship are equally invaluable. Networking is pivotal—it forges connections that lead to opportunities and collaborations.

SIT DOWN WITH MANOJ SANKER

Q: How did you identify the need in the market and create NemoCare, particularly in the biomedical industry?

A: An event at PESIT which brought doctors, engineers and and designers under one roof, piqued my interest in the field of biomedicine. I knew how to build, but was in search of what to build. I was motivated to work for a population that was in need and in a space where I can create impact, inspiring me to explore solutions in the domains of newborn and maternal care. A structured fellowship at IIT Hyderabad laid the groundwork for NemoCare. The first 6 months was centered around the immersion process, where I got to observe doctors in hospitals. Over the next 6 months I began the journey of identifying my problem statement, market scoping, positioning and registering a company.

Q: What exciting developments can we expect from NemoCare in the near future?

A: Our flagship product, Raksha, a wearable device is a major focus. Additionally, we've developed an AI platform for risk identification. Expanding into the US market for scalability is on the horizon. Pending funding and a grand launch, we're set to unveil a comprehensive parenting app covering vaccination, nutrition, and reminders.

Q: Reflecting on your journey, what were some pivotal challenges you encountered and how did you surmount them?

A: Accounting presented a significant learning curve, necessitating me to start from scratch. As a director and founder, managing finances and fundraising became imperative. Bridging this gap, I undertook courses. Transitioning from a technical background, I progressively honed marketing and communication skills.



Q: What has been the most gratifying aspect of steering your own venture?

A: Beyond doubt, relishing the work itself is paramount. The unwavering support amid challenges, the knowledge that we're positively impacting lives, savoring small victories, and gaining the empowerment to explore new horizons—these facets collectively render the journey profoundly fulfilling.

SIT DOWN WITH THE DEAN OF TRAINING & PLACEMENT

In the 8th edition of our newsletter, meet Dr. K.S. Sridhar, Registrar and Dean, Training and Placement of PES University. With a rich history at PES University, he played the role of Chief Coordinator of the Entrepreneurship Development Cell established with grants received from AICTE. He coordinated with General Motors Technical Centre, India (GMTCI) to establish a center on Partners for Advancement of Collaborative Engineering (PACE) at PES, the first such center in the country. As the Placement Head, he continues to initiate measures to ensure more industries visit campus year after year as well as maintain quality and quantity in student hiring. Join us to hear his insights on entrepreneurship, placements, and the evolving Indian startup ecosystem that could offer valuable perspectives during this pivotal semester and placement season:

1. Pursuing Entrepreneurship Alongside Traditional Paths:

For students, entrepreneurship is an additional choice alongside the traditional avenues of career opportunity. Venturing into entrepreneurship empowers students to think creatively and take charge of their narrative. Entrepreneurs play the role of 'captain of the ship' to showcase their talent, marking a significant shift. In my view, an entrepreneur, becomes the captain of the ship, uniquely highlighting their skills. It's a liberating experience, and I encourage students to embrace it!

2. Leveraging Academic Background for Entrepreneurship:

Students' exposure inside and outside the classroom is a goldmine. Engaging with professors and industry experts provides valuable insights. Internships and discussions are good platforms for much-needed exposure and experience. Thriving as an entrepreneur requires going beyond self-limitations. Each entrepreneurial journey is unique, and dedication is key to success. CIE at PES University offers a wealth of information, providing a foundation for budding entrepreneurs. Learn, apply, and you might be the next big success!



3. Evolution in the Indian Startup Ecosystem:

The surge in Indian startups conducting hiring drives is a game-changer and encourages students to embrace the startup wave without reservations. I wish to highlight the difference between large industries and startups. In big industries, you're a face in the crowd, while a startup, is a close-knit community where personal connections matter. The evolving startup culture allows students to contribute meaningfully and stand out. I urge students to take the plunge without hesitation. The decision however rests with the student as one must weigh options aligned with ambitions and aspirations.

SIT DOWN WITH THE DEAN OF TRAINING & PLACEMENT

4. Positioning for Startup Roles:

PES University uniquely positions students for roles aligned with their long-term goals. Balancing between academics and diverse activities, students get the opportunity to showcase their talent, build resilience through success and failure, engage in various activities to foster all-around development and contribute to the professional sphere and society. In startups, versatility is crucial, offering a unique advantage often overlooked by students unfamiliar with the startup environment.

5. Startup's Perspective in Hiring Dynamic Talent:

Startups seek candidates with a proactive attitude and determination to tackle challenges. A strong grasp of fundamentals, coupled with the ability to analyse and propose viable solutions, is paramount. Effective communication skills, considering the international reach of startup operations, are non-negotiable. Beyond qualifications, startups engage strategically during the hiring process to assess resilience and composure under pressure. Startups prioritize adaptability, problem-solving acumen, and effective communication as key attributes when seeking dynamic talent.



6. Upskilling Amid Economic Downturns:

Regardless of economic conditions, continuous upskilling is essential. Don't wait for tough times; keep learning because technology moves faster than you think. Upskilling is an ongoing journey, requiring graduates to stay ahead of the curve. Universities globally focus on making students career-ready. Economic ups and downs are part of the professional game, and being ready for them is crucial. PES University has been offering industry-oriented elective courses and Special Topic courses with increased emphasis on hands-on learning.

Additionally, project-based learning, capstone projects, and hackathons prepare students for real-world challenges. Make the right choices for a sustained and bright career. Staying calm and remaining focused to ensure a successful journey.

INNOVATION AND ENTREPRENEURSHIP ON CAMPUS



Abhaya is a SaaS platform in the cybersecurity space that is being incubated at PVL with an aim to help SMBs in the digital world be fully cybersecure. Their automated security monitoring infrastructure continuously monitors clients' web presence to ensure safety.

What inspired you in starting Abhaya and getting into the cyber security space?

Abhaya: Being from the ECE background, this wasn't a field I was taught but I got into the cyber security space purely out of interest! While looking for bugs across websites on the internet I noticed a pattern, this eventually gave rise to Abhaya.

What was this pattern that you noticed?

Abhaya: While scouring multiple websites for bugs, I noticed that sites which said "Soc compliant" were more prone to vulnerabilities. Then I thought "Why not come up with a solution for SMBs (small and midsize business') that tackles this problem" and started Abhaya. We find and give solutions for any bugs we find on our clients' websites.



What sets Abhaya apart from other cybersecurity companies?

Abhaya: Abhaya is tailor made for SMBs that require constant security and also companies with constant releases, our scans make sure we keep sites secure after every release.



What are some key lessons you've learned on this entrepreneurial journey?

Abhaya: I learnt that I had to make my product user-friendly. However tech-based my product was, it would finally have to be used by non-tech people in the market. Good UI and user experience factor hugely when it comes to how successful your product will be.

What advice would you give to other students who are considering starting their entrepreneurial ventures?

Abhaya: If you have an idea, give it a shot. You have nothing to lose, College is by far the best time to try and pursue it and also no one is depending on you. You have great support and mentorship being offered at PES and everything to gain from experiences like this.

INNOVATION AND ENTREPRENEURSHIP ON CAMPUS

Smart Chakra

Smart chakra is a startup that was founded by students from the batch of 2023. Being incubated at PVL, It is a startup with a vision to solve problems in the safety sector of automobiles. Their unique tyre management system keeps a check on tyre pressure and temperature to ensure their longevity and safety.

Was there a specific incident that helped you identify the need for this solution?

Smart chakra: I met with an accident that was caused by under-inflated tires. Wanting that incident to never occur with anyone again gave birth to the product that we built.

Was approaching the college and PVL initially part of the plan?

Smart chakra: Oddly enough, we had applied to Shark Tank India and made it to round 3 out of 5, this process was extremely tedious and this made us realize we needed a lot of mentorship. We had heard of PVL and on approaching them, they were supportive and offered valuable guidance



Being a student-led venture, what were some difficulties you faced dealing with the industry?

Smart chakra: Being students in this space has its pros and cons, while you may have room for error in certain areas and be given the benefit of the doubt as students, you also have to work much harder to get customers and clients to trust you.



How have you guys managed to find the balance between the demands of running a startup and your academic responsibilities?

Smart chakra: We believe that true entrepreneurs make things work even while facing great adversity. Time management along with Being passionate and dedicated to our cause helped us do our best in managing the two.

Tell us about some memorable moments that you've had along the way

Smart chakra: For us, it would be when we were offered to be bought out by a huge automobile company. Also the first time we generated revenue, we took our parents out to lunch and fully sponsored it, it felt really nice because we saw our parents be genuinely happy for us and all the tireless work we had put in seemed worth it.

A DEEP DIVE INTO GENERATIVE AI

Technological advances often cause disruption, but historically, they always eventually fuel economic and employment growth - the same applies to Generative AI. Initially, automation of multiple sectors may lead to job losses, but with time, jobs demanding novel skills and expertise will become the need of the hour, we just have to be ready for it. Some examples include but are not limited to, 'Prompt Engineers' who can skilfully design prompts for large language models to generate outputs with proximity to expectations; 'AI Auditors', those responsible for ensuring that results generated by a GPT-model are unbiased and accurate, and as the name suggests, 'AI Trainers' who will have to train models to be 'more human' to better customer-business relations, may be some of the most sought-after jobs.



image: <https://biomedicalodyssey.blogs.hopkinsmedicine.org/2023/10/the-endless-curiosity-oppenheimers-legacy-and-its-relevance-in-the-ai-era/>

But, there exist two sides to every coin. For models to give accurate and well-researched content, they must be trained with massive datasets that will always include biases, inherently leading to AI-generated responses being tinted by the same. With increased dependence on a powerful tool like Gen AI, it can place one's creativity and problem-solving

abilities in a crutch. There are also ethical concerns attached, as it can comply with malicious intentions by generating false and derogatory information.

Whether the strength wielded by generative AI will be a boon or a bane, only time will tell. But finally, it is up to us, the creators, to regulate its safe and secure usage, because as the saying goes, 'With great power comes great responsibility.'

ChatGPT is probably in the top few bookmarks in most of our browsers. One of the hottest tech trends of the 21st century, it is capable of answering any conundrum posed to it, generating code, images, text, videos, or anything new - with just a text prompt. This technology is heralding today's AI-driven era in an entirely different direction. This article takes a Deep Dive into this brand-new world.

A DEEP DIVE INTO GENERATIVE AI

ChatGPT, Google Bard, ChatSonic, DALL-E, Midjourney and several other platforms are all models of Generative Pre-Trained Transformers (GPT) or Generative AI, that fall under the vast umbrella of Artificial Intelligence. These systems can generate new content modeled on instances of existing datasets.

But in today's world that is brimming with data that has stoked a dire need for larger data centres, more efficient processors and top-dollar resources, why would we want to generate a surplus of it with Generative AI? The answer lies in the question - it can generate enormous amounts of data with appreciable accuracy backed by a human-like thought process, such that it can eradicate the need for us to perform monotonous and time-consuming tasks. Still in the early stages of development, Gen AI is primarily being used in the IT, media and telecommunications fields wherein, unlike the pharmaceutical and healthcare sectors, accuracy and veracity of data are not of utmost importance. Deployment of these models has optimized product-development cycles fuelling greater productivity.

For students, different flavors of Gen AI can drastically reduce development time. For instance, OpenAI's Codex can generate concise code for any problem statement, and for those looking to put together hassle-free, flawless presentations in minutes, tools like SlidesAI and Beautiful.AI save the day. Incomprehensible topics can be summarized in simple words by WordTune

and QuillBot. For those feeling stuck in an unimaginative rut, writing assistants like Writesonic and Jasper can rekindle creativity by suggesting new ideas for art, music, and expression. Meta's SeamlessM4T is a boon for multilingual learners, capable of translating and transcribing real-time conversations and texts into nearly a hundred languages.



STUDENTS IN FOCUS

Namrata Hangala: Fostering Change Through Art and Dedication

In the bustling corridors of PES University, Namrata Hangala, a third-year engineering student, stands out as a beacon of creativity and compassion. She is the founder of 'Dazzling Stars,' a non-profit dedicated to igniting positive change through the power of art and holistic development for the underprivileged.

From a summer camp workshop in her garage where she shared her passion for art with underprivileged children, it soon grew into a multifaceted community of creativity and hope with the unwavering support of her core team. From being Youth Board member at Reap Benefit and addressing prevalent local issues, to giving a TEDx talk, Namrata not only encourages art as a medium of expression, she leads by example. She's a gifted filmmaker and writer. Moreover, she's a founding member and content head of the PESU chapter of Enactus.

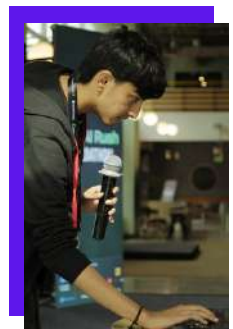


Namrata's story is a testament to the boundless impact that one dedicated individual can achieve.

Adithya S Kolavi: A Rising Entrepreneur and Tech Leader

In the dynamic realm of tech and entrepreneurship, Adithya SK has been making waves. Adithya's recent accomplishment in the GenAI rush Buildathon was no small feat. Out of a competitive pool of over 600 applicants, he ultimately secured a coveted spot among the top finalists.

As a Google Developer Student Club (GDSC) Lead for the class of '23, Adithya advocates for the significance of experiential learning through projects and active participation in hackathons. He emphasizes the value of consistency in coding and continual learning, and is keen on motivating members to engage in open-source projects as a way to incentivise contribution. He also initiated Cognitive Lab, a start-up dedicated to providing AI solutions for businesses. Adithya's vision extends to optimizing large language models for deployment and developing a proprietary product for Cognitive Lab someday.



Adithya's journey exemplifies the blend of technical acumen, leadership, and entrepreneurial spirit.

STUDENTS IN FOCUS

Anirudh Prasad: Unravelling the Code of Success in Cybersecurity

In the world of cybersecurity, Anirudh Prasad, a second-year CSE student, is emerging as a force to be reckoned with.

Anirudh's impressive track record includes being the Student Head at ISFCR and working right alongside his CTF (Capture The Flag) Team to achieve a remarkable 3rd place nationwide.

Additionally, he organizes his own CTFs. He has also ventured into the realm of bug bounties, successfully identifying vulnerabilities in programs at Stanford and Cambridge University.

Starting his coding journey in the sixth grade, Anirudh's fascination with ethical hacking led him

to explore reverse engineering and coding for cybersecurity purposes. His dedication is evident in his ongoing project to create his own operating system.

Anirudh serves as the Head of the HackerSpace Club on campus, and has even given a talk on web security at IIIT-B.

Anirudh Prasad's journey underscores the power of relentless curiosity and self-motivated learning in the realm of cybersecurity.



Achintya Krishna: Shooting for Success On and Off the Court

Achintya Krishna, a 3rd-year Computer Science Engineering student and Captain of the PESU basketball team, blends sportsmanship and entrepreneurship seamlessly. He has achieved significant basketball accolades, including securing gold in the South Asian basketball championship.

Achintya co-founded PocketCoach after recognizing a gap in local clubs' coaching standards during his time at the NBA Academy in Delhi. PocketCoach aims to elevate sports coaching by automating event organization for tournaments and offering an interactive platform for sports drills using computer vision and AI.

STUDENTS IN FOCUS

His participation in the Cisco ThingQbator program yielded 5 lakh rupees in seed funding. Achintya's ability to balance academics and entrepreneurship stems from his unwavering commitment and passion. He understands the importance of knowing when to say no and the value of initiative in the world of entrepreneurship. His journey exemplifies the heights one can achieve through dedication, whether on the basketball court or in the start-up arena.



Dhruv Tandon and Adithya Rohith: Sweet Success with !ceCream (Not IceCream) - A Team Effort

Dhruv Tandon and Adithya Rohith, second-year computer science engineers at PES University, transformed their love for frozen desserts into a venture called !ceCream (Not IceCream). In April, they embarked on this journey, creating a concept-based frozen dessert using liquid nitrogen. Their dedication led to refining the product through multiple iterations and overcoming logistical challenges. Their debut at a college fest at BMS College of Engineering was a resounding success, with sales exceeding 60,000 rupees.

Dhruv and Adithya's hands-on approach to entrepreneurship emphasizes learning by doing, from ideation to execution. They acknowledge the invaluable support of their friends, who helped them build the venture from scratch. Their experience not only taught them the intricacies of the F&B industry but also reinforced their passion for entrepreneurship.

Active members of PESU's ECell, Dhruv and Adithya pave the way with their innovation and resilience, and are poised to continue making strides in the entrepreneurial landscape.



MEET THE NEWSLETTER TEAM



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Dhruv Tandon



Kavya Nagori



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