BINARY BULLETIN

edition 01

Dotslash Returns: CSE Department Fest Electrifies





Campus After Four Years hiatus, the much-anticipated techno-cultural fest "Dotslash" organized by the Computer Science and Engineering department of CET made a triumphant return in December 2023. Held on the 8th and 9th, the two-day event sparked excitement and innovation throughout the campus.

Dotslash offered a diverse range of activities, catering to the interests of both college students and young tech enthusiasts. Technical sessions and workshops provided deeper insights into the latest advancements in the field, while competitions like coding challenges and hackathons tested the skills and creativity of participants. Interactive exhibitions showcased technological marvels and sparked curiosity among aspiring minds. But the festivities didn't stop there! "Dotslash for Juniors" was a dedicated section of the festival welcoming students from nearby schools. Engaging events and activities nurtured their interest in computer science and ignited a passion for technology.

The resounding success of Dotslash speaks volumes about the dedication and hard work of the organizers. It was a vibrant platform for knowledge sharing, skill development, and fostering a love for technology amongst students of all ages. We eagerly await the next edition of Dotslash, promising even more electrifying experiences for the campus community.

CS CUP

The much-awaited CS CUP, the Inter Year Sports Battle for Computer Science and Engineering Department students at CET Trivandrum, unfolded after a four-year hiatus, promising a week filled with excitement, competition, and camaraderie. The event was officially inaugurated on January 29th, 2024, by the Head of Department Dr. Balu John, along with the esteemed department representative Gokul G Menon.







After a week of thrilling competitions, the fourth-year students emerged victorious, securing the coveted CS CUP. The third-year students secured the second position, showcasing their dedication and talent in the various events. Aswin Gigo Jacob was honored as the CS Cup'24 Icon for his Spectacular performance throughout the week.

Tech News

Open AI releases 'SORA'

OpenAI once again shook up the AI world with a video generation model called Sora. The demos showed photorealistic videos with crisp detail and complexity, based off of simple text prompts. A video based on the prompt "Reflections in the window of a train traveling through the Tokyo suburbs" looked like it was filmed on a phone, shaky camera work and reflections of train passengers included. No weird distorted hands in sight. The 7 trillion dollar question is, how did OpenAI achieve this? We don't actually know because OpenAI has barely shared anything about its training data. But in order to create a model this advanced, Sora needed lots of video data, so we can assume it was trained on video data scraped from all corners of the internet. And some are speculating that training data included copyrighted works. OpenAI did not immediately respond to request for comment on Sora's training data.

Women In AI: Irene Solaiman, head of global policy at Hugging Face

Irene Solaiman began her career in AI as a researcher and public policy manager at OpenAI, where she led a new approach to the release of GPT-2, a predecessor to ChatGPT. After serving as an AI policy manager at Pillow for nearly a year, she joined Hugging Face as the head of global policy. Her responsibilities there range from building and leading company AI policy globally to conducting socio-technical research. Solaiman also advises the Institute of Electrical and Electronics Engineers (IEEE), the professional association for electronics engineering, on AI issues, and is a recognized AI expert at the intergovernmental Organization for Economic Co-operation and Development (OECD).

Lenovo's Transparent Laptop Concept Is Something Else

Lenovo is reportedly working on a transparent laptop, and it's bringing a concept device to this year's Mobile World Congress in Barcelona. This is according to leaker Evan Blass, who shared some images of the device on Twitter.

Blass first shared the news of the device's existence last week, together with a couple of images, shared on Windows Report. The images show a laptop-like device with a completely bezel-less, semi-transparent display. The components are apparently housed in the display's (sizable) chin, while the keyboard is an equally futuristic-looking flat, shiny, tablet-like slab with fully flat or at least hidden keys.

Dutch startup Monumental is using robots to lay bricks

Bricklaying robots aren't exactly an untapped concept. At the moment, Hadrian X is probably the best known player in the space. The U.S. firm specializes in building structures out of large concrete masonry blocks. Amsterdam-based Monumental, meanwhile, specializes in the more familiar red clay variety.

The startup was founded in 2021 by the pair behind data visualization firm Silk (now a Palantir joint). Monumental has already been doing limited pilots in its native Netherlands, including the 15-meter exterior of an office building. Partnerships with 25 contractors have followed, including low-income housing. I can't speak much to the efficacy of the system beyond what I've seen in some video demos, but can say that the company appears to be tackling the problem from a variety of fronts, beginning with an autonomous cart designed to shoulder heavy payloads. From there, another robot spreads liquid mortar and places bricks

Apple researchers unveil 'Keyframer': An AI tool that animates still images using LLMs

Apple researchers have unveiled a new AI tool called "Keyframer," which harnesses the power of large language models (LLMs) to animate static images through natural language prompts.

This novel application, detailed in a new research paper published on arxiv.org, represents a giant leap in the integration of artificial intelligence into the creative process — and it may also hint at what's to come in newer generations of Apple products such as the iPad Pro and Vision Pro.The research paper, titled "Keyframer: Empowering Animation Design using Large Language Models," explores uncharted territory in the application of LLMs to the animation industry, presenting unique challenges such as how to effectively describe motion in natural language.

Imagine this: You're an animator with an idea that you want to explore. You've got static images and a story to tell, but the thought of countless hours bending over an iPad to breathe life into your creations is, well, exhausting. Enter Keyframer. With just a few sentences, those images can begin to dance across the screen, as if they've read your mind. Or rather, as if Apple's large language models (LLMs) have.

Department of Computer Science and Engineering

Placement Corner

The job placement season can be a bit overwhelming, as there are many factors to consider such as market conditions, company options, and personal interests. However, don't worry too much as your hard work and a bit of luck will ultimately determine your success. During this time, we had several companies that offered salaries ranging from 5 to 14 LPA, and a dream offer.

Most companies will have a preliminary coding, Aptitude, or MCQ round. For the coding rounds, I suggest practicing on Leetcode, and you can try out the Blind 75 series of questions that covers almost every topic. For MCQs, it is important to have a good grasp of your core subjects, especially in DS, OS, DBMS, and Computer Networks. Aptitude tests can vary from SHLs to High School Mathematics, so be prepared for anything.

Technical and managerial interviews can vary depending on the interviewer you get, which can be a matter of luck. It is important to be thoroughly familiar with everything on your resume. You should try to build a few good-quality projects and include them on your resume. If you have prior internship experience, you can limit the number of projects. Before appearing for any tests or interviews, I recommend going through the previous year's questions. Alternatively, you can connect with people on platforms like LinkedIn to gain more insight into how it works. Remember to stay positive and keep working hard, you got this!

- Gayathri B (S8)

My First Hackathon Experience: Kochi Hackathon 2024 - Shan (S2)

I have always been interested in programming and technology, but I never had the chance to participate in a hackathon until recently. I have applied to some hackathons prior too, but our team was not selected. So this time I applied to the 'KOCHI HACKATHON 24' as a single participant and gave my idea on a blockchain based decentralised application.

Kochi hackathon was a two day event organised by Netstratum Technologies in kochi, Ernakulam. The theme for the hackathon was 'Fintech'. Various professionals in the field of fintech were present for the event to guide and mentor the participants. I received a lot of praise and appreciation for being the only first year student among the participants. Since I was a single participant, I had to work on presentation. I was nervous and excited at the same time, as I wanted to prove myself and learn from the experience.

The hackathon started on Saturday morning, and I arrived at the venue with my laptop and other necessary items . I checked in and received some goodies and a T-shirt with the hackathon logo. I also got a chance to network with some of the other participants, mentors, and judges. There were around 16 teams in total from all over India. After the opening ceremony and the keynote speech, the hackathon officially began. I had 36 hours to complete my project and submit it online. I decided to work on a decentralised application based on blockchain technology that helps in collecting KYC for a company. I was given a cubicle to work on and I started coding. I chose the Ethereum platform because I wanted to create a solution that was secure, transparent, and decentralized. I thought that blockchain could be useful for creating a Fintech application that could facilitate KYC more securely.

My project consisted of two main components: a smart contract and a web interface. I wrote the smart contract in a language called Solidity, compiled using the REMIX IDE and used a tool called Ganache to create a local blockchain network for testing purposes. I also used a service called Infura to connect to the main Ethereum network for deployment. For the web application I used the flask framework in python and used the web3.py library to interact with the Ethereum blockchain.

The web interface displayed the information from the smart contract and the blockchain, and it also allowed users to interact with them.

I spent most of the time coding and debugging my project. I also attended some workshops and mentor sessions that were organized by the hackathon organizers. These sessions helped me to learn new skills, get feedback, and solve problems. I also met some of the other participants and saw their projects. I was amazed by the diversity and the creativity of the projects, and I learned a lot from them. I finished my project on Sunday afternoon, and I submitted it. I also prepared a presentation to showcase my project to the judges and the other participants. I had 8 minutes to present my project and 2 minutes for the judges to ask questions. I explained the problem, the solution, the technology, and the and the business possibilities of my project.

I was nervous and excited during the presentation, but I managed to deliver it without any major issues. I also answered the questions from the judges and the audience. I received some positive feedback and some constructive criticism. I was happy and proud of my project, and I felt that I had done my best.

The hackathon ended with the closing ceremony and the award ceremony. The judges announced the winners of the hackathon, and they gave out prizes and certificates. Unfortunately, I did not win any prize, but I was not disappointed. I was satisfied with my project, and I felt that I had gained a lot of experience and knowledge from the hackathon. I also made some new friends and contacts, and I had a lot of fun during these sleepless 36 hours.

The Kochi Hackathon was my first hackathon experience, but it was not my last. I decided to participate in more hackathons in the future, as I wanted to improve my skills, learn new technologies, and create more solutions. I also wanted to join a team and collaborate with other people, as I realized that teamwork is essential for success. I think that hackathons are a great way to learn, create, and innovate, and I would recommend them to anyone who is interested in programming and technology.

Students Corner

Colors - Kenz (S4)

My eyes close at night and my mind embarks on a familiar journey. There I live again as my memories replay but with shades of emotions.

Distinct memories of a time of unbounded laughter and carefreeness, is painted bright green, like the enchantingly lush jungles in tales of knights and warriors. Emerald shades dance and sway, mirroring the joy these memories inhabit.

A cerulean blue is felt, when I live the memories that aren't mine. Relishing every minute, as I dive deeper into this sapphire cavern, unearthing more of what could have been in my wildest dreams. Those scenes and setting lay an imprint on me, as I relax to this blue.

Being wrapped in those lo-fi blankets for the first time again, quietly serenading me while the scent of coffee fills the air and the cold of the rain blows in, as I flip those pages of familiarity is the brown of comfort, like the rhythm of a cherished hug.

In the tapestry of my mind, red burns of desire while the euphoric joy akin to that of a child is woven yellow. The hope, I've promised to never let go is an unstained white, and then there's the soothing peace in lavender, taking me to times of those momentarily unrequited love and joy.

Colours, make this otherwise impossibly dark night, vivid as the brightest star. Letting me traverse those web of thoughts and ending with an invaluable masterpiece.

Art Corner





- AmalRaj R (S4)

To this unrelenting world where I promised I would stay. - Kenz (S4)

It's scary how the days wither away into obscurity. Memories of the days past are quickly becoming nonexistent. A younger me, full of hope had his dreams of today, but all I want is to go back to yesterday.

Nobody warned me, how chains are gonna keep shackling me harder and harder, till I sink and drown and die in this ocean called tomorrow. Nobody warned, how quickly an year can pass, from a time of sincerity and placidity to days of despair and fear.

Its depressing, how I came here full of excitement to start a new season of elation and fantasies. Now it's just me, back to that same old ugly place pushing myself further, driven by fear of the unknown.

It's hollowing, when I see it happening again and losing interest in everything and receding into myself.

A Fleeting Life - Deborah Augustin (S4)

The cry of a newborn babe was heard And so new life was brought into the world Celebrated with serenades of hope and joy But carrying tinges of worry

The babe grew up to love his home And even came up with a little poem Of the willow tree and bubbling stream And the ones he called his own

There were days of fun and laughter And days of gloom and dread But to him it did not matter Not if they were together in the end

But alas the day drew nearer
Until finally it was upon him
The day when there was none by his side
To each their own it had become

His riches gained lost in naught And he was soon lost in thought Of the willow tree and bubbling stream And the ones he had once called his own

He lifted his eyes and made his way
To where he knew his heart lay
But what greeted his eyes was barren land
No willow tree to be seen nor stream to be heard

All that remained was an empty shell Memories to keep him company Until the day he closed his eyes And let the darkness reign for eternity