



Panimalar Engineering College

(A Christian Minority Institution)

Jaisakthi Educational Trust

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Tech News

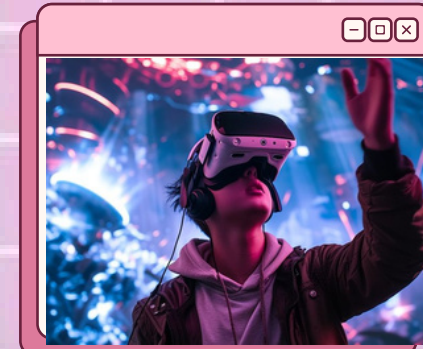
Department of Computer Science and Engineering

DEPARTMENT MISSION

M1: To develop our department as a center of excellence, imparting quality education, generating competent and skilled manpower.

M2: To prepare our students with high degree of credibility, integrity, ethical standards and social concern.

M3: To train our students to devise and implement novel systems, based on Education and Research.



- My Contacts
- Recent
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 - J.Gayathri (III A) student editorial board
 - V.Aparna (III A) student editorial board

PROGRAM SPECIFIC

OBJECTIVES (PSOs)

PSO 1: To inculcate technical skills to analyze, design networking, web services, multimedia, big data analytics and recent topics of varying complexity.

PSO 2: To develop the capability to comprehend and solve the interdisciplinary problems through appropriate technology with the understanding of contemporary business environment.

PSO 3: To develop an ability to utilize the latest technology and platforms to become a triumphant professional, successful entrepreneur and an urge for pursuing higher studies.

PROGRAM EDUCATIONAL

OBJECTIVES (PEO's)

PEO1: Employment/Higher studies: To impart and disseminate sound knowledge to the students on the fundamentals of mathematics and advanced fields of computer science and interrelated disciplines to solve simple and complex engineering problems and train them to achieve sustainable growth in their professional career.

PEO 2: Discipline Knowledge: To enhance the ability of students to evaluate the specific requirements of software industry and provide innovative engineering solutions and efficient product designs.

PEO 3: Individual Skills: To facilitate the students to make use of their technical competency to identify and develop appropriate product design, development, testing, maintenance, analysis of problems and provide corrective means

PEO 4: -Professional, Personality and Presentation: To enable the students to develop strong leadership qualities with aggressive optimism, multidisciplinary skills, excellent communication skills and function as effective and reliable team members giving importance to professional and ethical principles.

PROGRAM OUTCOMES (POs)

PO1 (Engineering knowledge): Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2 (Problem Analysis): Identify, formulate, research literature, and analyze complex engineering problem reaching substantiated conclusions using first principles of mathematics, natural sciences, engineering sciences.

PO3 (Design/development of solutions): Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4 (Conduct investigations of complex problems): Use research -based knowledge research methods including design of experiments, analysis, interpretation of data, synthesis of the information to provide valid conclusions.

PO5 (Modern tool usage): Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6 (The engineer and society): Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the Professional engineering practice.

PO7 (Environment and sustainability): Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, need for sustainable development.

PO8 (Ethics): Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9 (Individual and team work): Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10 (Communication): Communicate effectively on complex engineering activities with the engineering community and with society at large

PO11 (Project management and finance): Demonstrate knowledge and understanding of the engineering and management principles and apply these to on as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12 (Life -long learning): Recognize the need for, and have the preparation and ability to engage in independent and life - long learning in the broadest context of technological changes.

DEPARTMENT VISION

To provide an academically conducive environment for individuals to develop as technologically superior, socially conscious and nationally responsible citizens



2024: The Time for Extended Reality - A Fresh Age of Immersive Technology

Entering 2024, we will see significant advancements in Extended Reality (XR) technology, as leading tech companies introduce state-of-the-art XR headsets and smart glasses. These advancements offer opportunities for growth within the XR community, allowing for more people to engage in immersive experiences and pushing the industry towards a fresh era of digital engagement.

Meta Quest 3: Taking the Lead in Mixed Reality Development

The Meta Quest 3, which came out in October 2023, has rapidly established itself as a top contender in the Mixed Reality (MR) industry. Combining augmented reality (AR) and virtual reality (VR) provides users with a smooth and captivating experience. The Quest 3's popularity is driving an increase in MR app creation, making the technology more widely available and accessible to more people. This device plays a crucial role in making MR more common, reducing obstacles for consumers, and promoting widespread acceptance.

Apple Vision Pro: Transforming Spatial Computing

The upcoming release of Apple Vision Pro in the XR field on February 2, 2024, is highly awaited as one of the year's most anticipated events. The Vision Pro is being promoted as a significant step forward in "Spatial Computing," and is anticipated to transform the way users engage with digital worlds. Initially released in the US, this gadget has the potential to be just as groundbreaking as the iPhone was in 2008, establishing fresh benchmarks in user interaction, visual aesthetics, and extended reality capabilities.

Samsung, Google, and Sony are all increasing their presence in the XR industry.

Samsung and Google are getting ready to release their XR headsets, but there is little information available. Rumors suggest that both gadgets will run on Qualcomm's Snapdragon XR2 Plus Gen processor, showing an emphasis on strong performance features. These releases will boost the XR industry, intensifying rivalry and potentially reducing expenses for buyers.

by Harini .M
Dhanishaa infanta.B((III A)

← → ↻ 🔍 Biodegradable Electronics: A Greener Future for Technology

Biodegradable electronics represent a groundbreaking development in technology, aiming to reduce electronic waste and its environmental impact. Unlike traditional electronics, which can take hundreds of years to decompose, biodegradable electronics are designed to break down naturally after their useful life. These devices are created using eco-friendly materials such as organic polymers and biocompatible materials that decompose safely. The shift towards biodegradable electronics addresses the growing concern over electronic waste, which contributes significantly to pollution and resource depletion. By incorporating materials that can be broken down by natural processes, manufacturers aim to minimize the environmental footprint of electronic products. Applications of biodegradable electronics range from disposable medical devices to sustainable packaging and consumer electronics. This innovation not only helps in managing waste but also promotes the development of more sustainable and environmentally responsible technology. As research and development continue, biodegradable electronics could become a standard in the industry, paving the way for a greener future.

by Arshitha yasmin

← → ↻ 🔍 Smart Fabrics: The Future of Wearable Technology

-by Bhavadharani. C

Smart fabrics, also known as e-textiles, represent a groundbreaking advancement in wearable technology. These innovative materials incorporate electronics and sensors directly into textiles, enabling garments to interact with the wearer and their environment. Smart fabrics can monitor health metrics like heart rate and body temperature, providing real-time feedback for fitness enthusiasts and patients alike. They also offer functionalities such as temperature regulation and dynamic color changes, enhancing comfort and style. Applications extend beyond health and fashion; smart fabrics are being used in sports to improve performance through real-time data collection. Military and safety gear benefit from enhanced communication and environmental monitoring capabilities. As technology evolves, smart fabrics promise even more sophisticated features, such as energy harvesting and enhanced connectivity. With ongoing research and development, these textiles are set to redefine how we integrate technology into our daily lives, making them an exciting frontier in wearable technology.

WHAT'S POPPIN' IN CLUBS? - □ ×

CODER'S FORUM
 GitHub Foundations certifications:
 Madumitha V, Shruti S, Johith Raj,
 Madhavakumar D, Prasanna A
 , Sanjay K

UNIQUE AUTOMATORS
 On September 25th 2024, they hosted
 Hack-A-Bot ,
 an inter-college RPA and AI automation challenge

student startup? SparkTech 🔍

Start-up company :SparkTech
 Found by Malathi B(CEO)
 Our moto : Igniting ideas Illuminating futures
 Our company is a service based company and
 we provide services such as
 Software developments
 Ui/ux designing
 Tech training and
 Tech writing

Naveen v board advisor
 Malathi M team lead

ACHIEVEMENTS IN CSE DEPT '24 ✕

CTS TECHATHON 2.0
 Winners: Thrisha, Logapriya, Srinithi,
 Sri Rithi, Sharmila, shruthi S

IET INDIA NOKIA
 Excellet innovator award : Arundhathi T.
 Special award : Naveen Kumar

HACK DIVA SEASON 2
 Winner: Srithika Logeswaran

CM TROPHY general category
 Gold medal (Doubles) Sindhuja

VIT hack-the- horizon
 Gayathri J

Student Excellence award,
 pitch conferral and surprise event from R.M.K engg
 college .JAM from SIMATS
 Arundhathi T.

Certified Ethical Hacker (CEH)
 Durairaj V P

Paper Presentation
 Thrid place: R. Janavisree

Speech competition at Thiruvallur Collectorate Office
 Second prize with cash prize of Rs. 3000.
 Naveen kumar

Tamil speech (poonamallee region)competition
 first place: Naveen kumar

Real-Time Insights: Integrate WebSockets and APIs
 for live, actionable data and up-to-the-minute
 predictions.

-by Gopika E

Building an advanced stock price prediction model involves leveraging sophisticated technologies to enhance forecasting accuracy. Start by collecting and preprocessing diverse data sources, including historical stock prices, news sentiment, and macroeconomic indicators, using tools like Pandas and TA-Lib. Employ machine learning models such as Random Forest or Support Vector Machines, and explore deep learning techniques like LSTMs or Transformers for handling sequential data. Integrate real-time data using WebSocket protocols and APIs, and deploy the model using cloud platforms and containerization tools. For user interfaces, utilize frameworks like React for web apps and Flutter for mobile apps, incorporating visualization libraries such as D3.js or MP Android Chart to present predictions effectively. This combination of advanced modeling, real-time integration, and user-friendly design can significantly improve stock price forecasting accuracy.