VOLUME II | ISSUE II | JUN 23

KONGUNADU

College of Engineering and Technology
(Autonomous)

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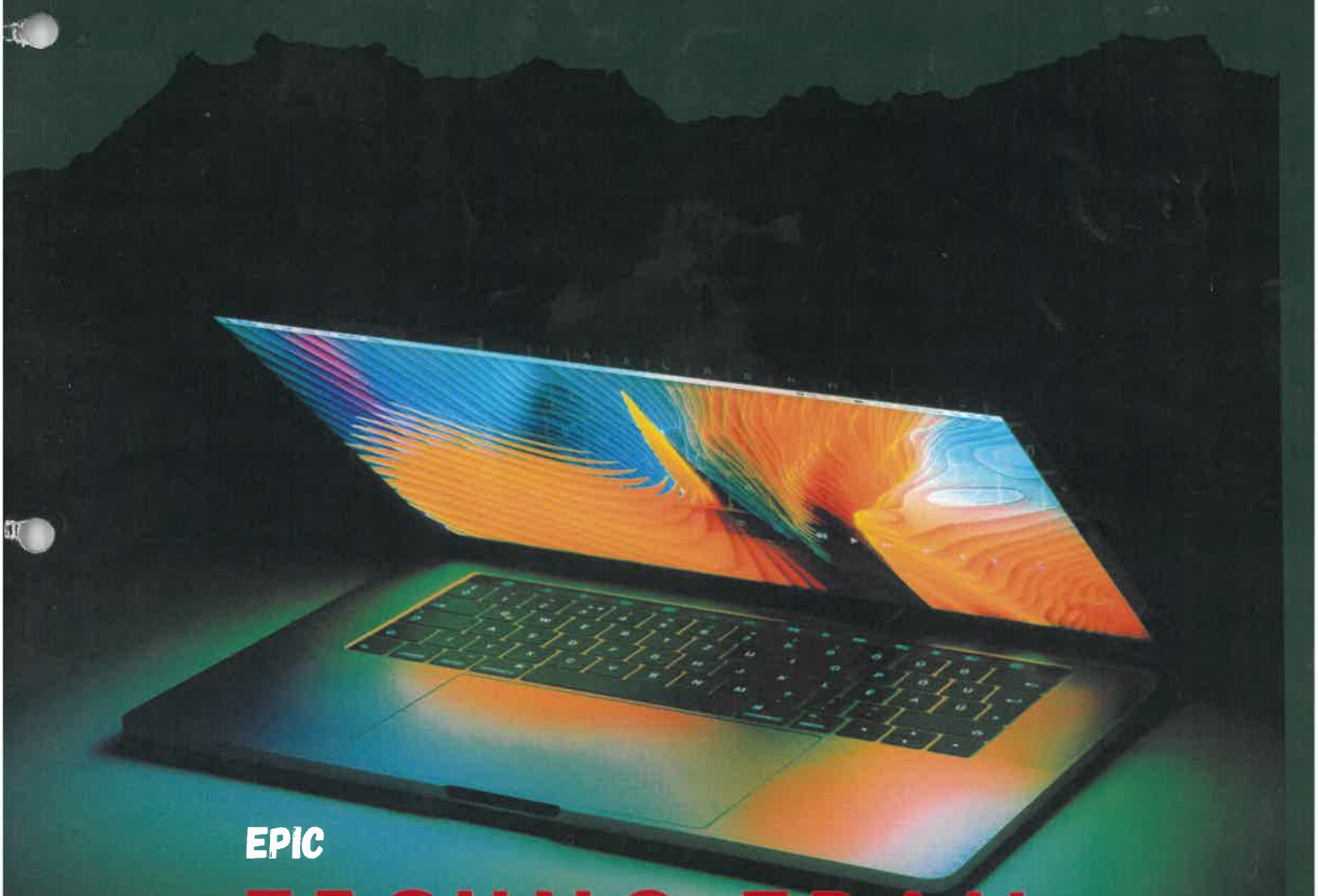
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



EPIC

TECHNO TRAIL

MAGAZINE

TECHNICAL ACHIEVEMENTS

PAPER PRESENTATION

Vinushree M K and Kavinya Harini S of III Year Computer Science and Engineering Department won First Prize in paper presentation held

A solution can be built using generative AI technology to overcome the lack of appropriate information on artefacts and the limited interactivity of existing chatbots in the museums. A small robot is made which is moveable and contains a display and it follows the visitor. This could give better exposure about artifacts which will improve thevisitor's experience. The visitor can engage with the robot in their navigation pathways and it includes the user interactive mode via its display, which also includes a microphone. The robot is connected to internet in wireless manner, and when a visitor asks any inquiries or information about the artefacts, then the input is picked up by the microphone and sent to a server, where the request is received. The server sends the response to the robot with help of trained model, which will be delivered to the visitor.

Quantum computing is an emerging technology that uses the principles of quantum mechanics to perform computations far beyond the capabilities of classical computers. Unlike traditional computers, which process information in bits (0s or 1s), quantum computers use quantum bits or qubits, allowing them to exist in multiple states simultaneously through superposition and entanglement.or.

Naveen V, Vijayabarath D, Jegan S of Final year Computer Science and Engineering won Best Paper Award in Paper Presentation

Majority of the population seems to prefer visiting shopping malls and parks over museums although it is a home to a wealth of cultural treasures. The complete history behind each artefacts have not provided to the visitors with proper guide. AI has the potential in transforming the exposing way of museums with a personalized experience, increasing visitors happiness and engagement.

Keerthiya R, Arthi N, Anjana S of Final year Computer Science and Engineering won Best Paper Award in Paper Presentation

Puviyasree M, Srividhya R, Gowsalya M of Final year Computer Science and Engineering won Best Paper Award in Paper Presentation

Puviyasree M, Srividhya R, and Gowsalya M, final-year students of Computer Science and Engineering, showcased their innovative research on this topic, earning the prestigious Best Paper Award at a recent paper presentation event. Their work highlights the untapped potential of AI in making museum visits more informative, interactive, and enjoyable.

Sridharshini M, Tharika Dharshini S of Third year Computer Science and Engineering won Second prize in Code Cluster organized by IT Department - Kongunadu College of Engineering and Technology

Karnesh P,Tamil M , Srikanth B, Yuvaraj V of Third year Computer Science and Engineering won Second prize in Hackathon organized by IT Department -Kongunadu College of Engineering and Technology

Hackathon

AGNITIONZ

In a world on the move, innovation ignites,
Climate crises spark global fights.
Communities unite, voices rise loud,
A new era dawns, hopeful and proud.

Join us for an electrifying hackathon at Agnitionz, where creativity meets technology! This event invites innovators, coders, and thinkers to collaborate and tackle exciting challenges in a dynamic environment. Participants will have the chance to brainstorm, build, and present their projects, all while competing for fantastic prizes.

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Solo Achievements:

Student, recently showcased his knowledge and quick thinking in the Rapid Quiz competition. His impressive performance earned him the prestigious Second Prize in this challenging event.

Computer Science and Engineering (CSE) student, participated in the "Tug of Code" competition and emerged as the First prize winner.

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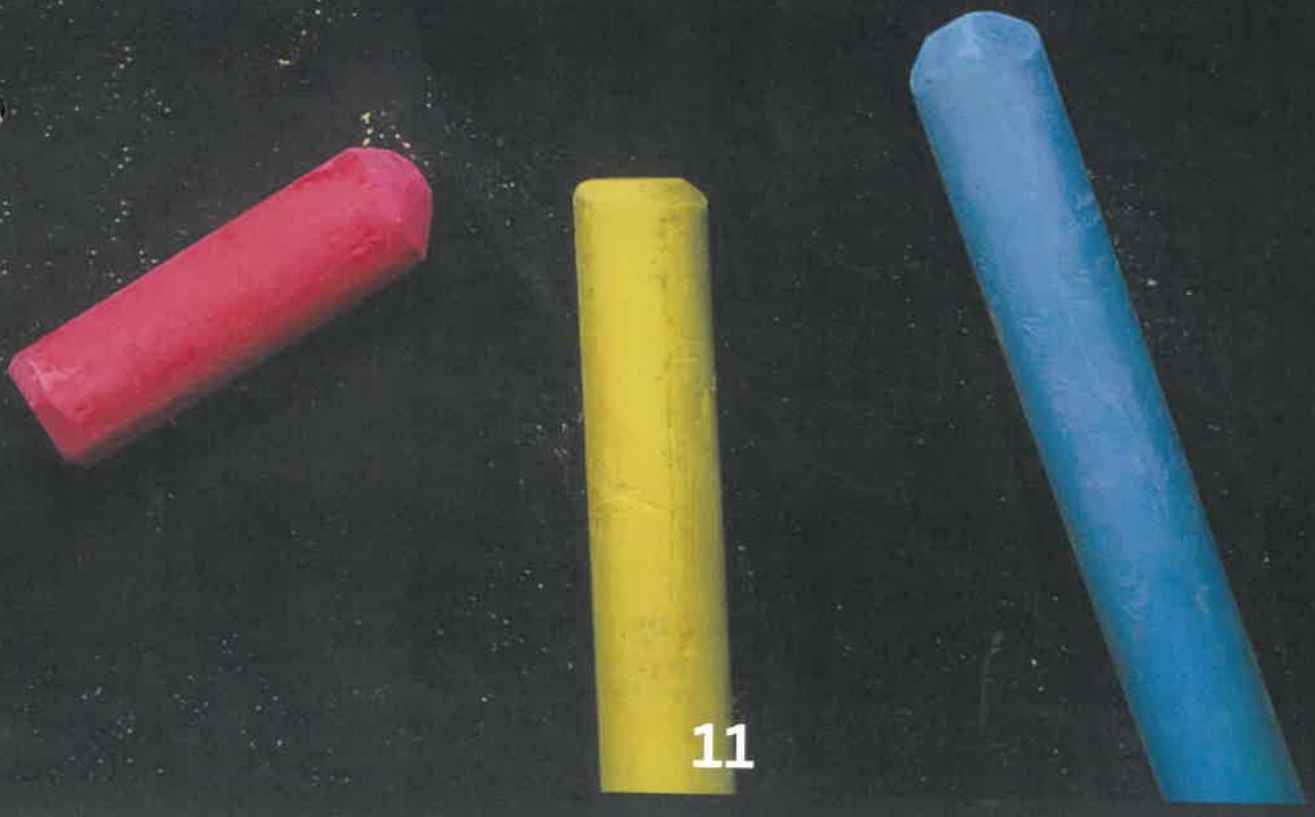
SECTION
III

FACULTY *ACHIEVEMENTS*



GRAPH-BASED NEURAL NETWORK MODEL FOR PREDICTING URBAN ENVIRONMENTAL AIR QUALITY USING SPATIO-TEMPORAL DATA OPTIMIZATION

Environmental protection and the need for accurate pollutant forecasting have become increasingly important as worries about environmental issues and the harmful effects of pollution have grown. Predictive accuracy of air pollutants is generally unsatisfactory due to the fact that conventional methodologies prioriti time series analysis over the important spatial transmission dynamics among neighbouring locations. To address this inherent limitation, our proposed solution introduces an innovative Time Series Prediction Network, augmented by the auto-optimization capabilities of a Spatio-Temporal Graph-based Neural Network. This groundbreaking network comprises distinct spatial and temporal modules. The spatial module harnesses a Graph Sampling and Aggregation Network to extract essential spatial information from the data. Simultaneously, the temporal module integrates a Bayesian approach with a Complex Valued Graph Gated Recurrent Unit (BCV-GRU), seamlessly incorporating a graph network into the Gated Recurrent Unit (GRU) to capture temporal intricacies. Moreover, to manage the challenge of model inaccuracy stemming from inappropriate hyperparameters, Bayesian optimization was employed. The efficacy of our proposed method was validated using real PM2.5 data from the USGS website, showcasing a significant enhancement in prediction accuracy. This study puts forth a robust and effective approach for forecasting PM2.5 concentrations, bridging gaps in existing methodologies and contributing substantially to the evolution of environmental prediction models.

Dr.J.Yogapriya

EXTRA CURRICULARS

Art:

Art's beauty transcends mere aesthetics. It ignites a emotions, sparks the imagination, and connects us to artists, cultures, and even ourselves.

"To draw, you must close your eyes and sing."

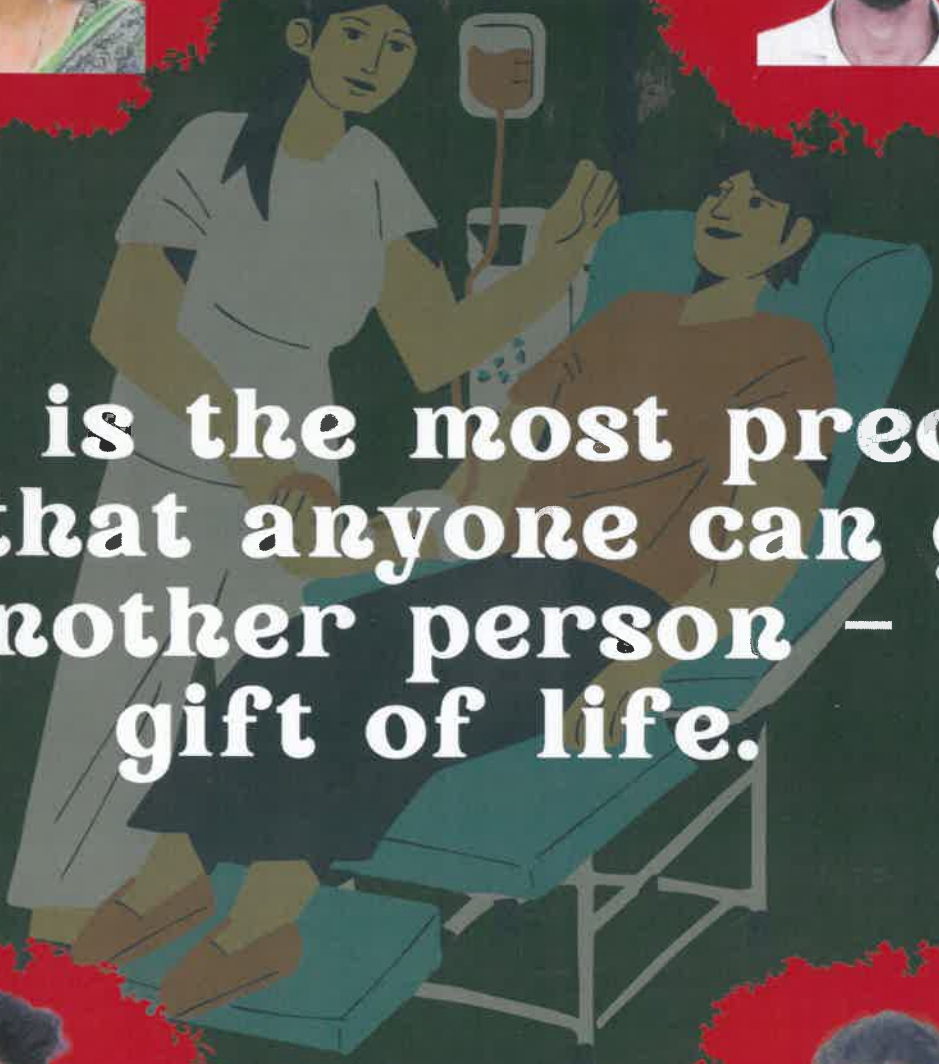
- Pablo Picasso

Photography:

கவிதை:

பிரச்சினைகளை கண்டு பயந்து
பின் வாங்காதீர்கள்
காற்றை எதிர்த்தே
பட்டங்கள் மேலே
செல்கின்றன
தோல்விகளால் அடிபட்டால்
உடனே எழுந்து விடு
இல்லையேன்றால் இந்த உலகம்
உன்னை புதைத்துவிடும்
சோதிப்பது காலமாக இருந்தாலும்
சாதிப்பது நீங்களாக இருங்கள்

Blood Donors:



Blood is the most precious gift that anyone can give to another person – the gift of life.

FACULTY EDITOR

Mr.K.Karthick

A faculty editor, contributing to a magazine offers a great opportunity to spotlight academic achievements, share insights, and inspire the community. Here's a sample outline and content suggestions to consider for a faculty editorial roledy textEnd with a note of gratitude to the contributors and readers, encouraging everyone to keep pushing boundaries and contributing to the magazine

Kongunadu

MAGAZINE EDITORS!

KARNESH

VIJAYABARATH

Kongunadu
College of Engineering & Technology
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"கல்வியின் ஒளி, அறிவின் பாதையை
வெளிக்கொள்கிறது."

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