STUDY WORLD COLLEGE OF ENGINEERING

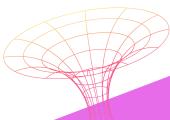(Approved by AICTE,New Delhi & Affiliated to Anna University,Chennai)

Palathurai, Madukkarai, Coimbatore - 641105

STUDY WORLD
College of Engineering
Coimbatore

International Conference on Contemporary Challenges in Science and its Engineering Applications

[IC3SEA 2023]
24-25 MARCH 2023

ORGANIZED
BY

Study World College of Engineering, Coimbatore
[Approved by AICTE & affiliated to Anna University, Chennai]

About the College

The Study World Education Holding Group has been on the ascent in the International Education sector, since its commencement in the year 2005, empowering students worldwide with overall knowledge information. Study World College of Engineering begun in the year 2009, is one of the prestigious renowned private institutions of Coimbatore, India. The College is perceived by the Government of Tamilnadu, supported by All India Council for Technical Education, New Delhi and associated to Anna University, Chennai. The College offers four under graduate programmes Bachelor of Engineering in the branch of Computer Science and Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering and Mechanical Engineering. The college is situated in a rambling ground on Coimbatore-Palakkad National Highway (NH-67) at Palathurai, Madukkarai, Coimbatore, Tamilnadu 641105.

The college has the scholarly climate for brilliant guidance and involved preparation stages completed by gifted and experienced staff to form our students into completely fledged technocrats and experts. Covered under a characteristic green shade, the ground is settled in a peaceful rural area of Coimbatore, permitting students to focus on studies, examinations, imagination, and development. The continually refreshed cutting edge research centers of the grounds satisfy the hunger for perfection of information. Sufficient chances to show of strategic brain and talented ability engineers have large amounts of the grounds. The enormous number of MoUs that the college has is a strong evidence of the tremendous organization of the Global Educational Hub - The Study World Education Holding Group.

Separate hostel facilities are accessible for young men and young ladies, with spacious rooms and separate mess with variety dishes. Students say that they don't stay in hostel as we provide a homely environment.

Students and Faculties are offered bountiful chances to include themselves in co-curricular and extracurricular exercises through different clubs, affiliations, International Conferences, FDPs, Workshops and Sports Exercises.

About the Conference

Welcome to the International Conference on Contemporary Challenges in Science and its Engineering Applications [IC3SEA 2023] which will be organised in Study World College of Engineering, Coimbatore, Tamil Nadu on 24-25 March 2023. The coverage of several systems science and engineering disciplines reveals difficult new research topics in these fields. They will be of great use to readers looking for fresh research questions and issues. In order to cope with ever-increasingly complex systems and recently emerging applications, this conference offers a thorough review of all significant topics in systems science and engineering and presents the concerns and challenges in these fields. Students get a better understanding of engineer's jobs and the connections between engineering and science via involvement in engineering activities. Participating in these activities not only makes students knowledge more relevant and firmly ingrained in their worldview, but it also aids them in developing an awareness of the disciplinary and transdisciplinary notions of science and engineering. This conference will include research presentations, keynote lectures, invited talks, tutorials, panel discussions, and poster presentations. Submissions for technical papers, workshop/special session ideas, and tutorial proposal submissions are now open. Its goal is to provide a great platform for professors, researchers, and scholars from all over the world to present the most recent innovative research results as well as the most recent developments and trends in the fields of Mechanical, Electrical, Electronics, Communication, Computer, and Information Technology.

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s.kannadasan@swehg.com,
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All articles will be subjected to a double-blind peer review procedure, with approval based on quality, uniqueness, technical substance, and relevance.

Track 1: Big Data Analytics

• *Data Stream Algorithms*
• *Models of Computation for Massive Data*
• *Efficiency and Scalability*
• *Data Mining Challenges with Big Data*
• *Techniques for Data Visualization*
• *Ontology and Knowledge Sharing*
• *Linear Regression*
• *Bayesian network and naive Bayes*
• *HDFS (Hadoop Distributed File System)*
• *Data Mining and Business Intelligence*
• *Big Data Analytics and Big Data governance*
• *Big data Analytics and Applications*
• *Data Modeling& Semantic Engineering*
• *Data, Text, Web Mining, & Visualization*

Track 2: Artificial Intelligence and Machine Learning

• *AI Algorithms*
• *Fuzzy & Neural System*
• *Adaptive agents*
• *Pervasive infrastructure and development*
• *Expert systems*
• *Fuzzy Computing with Words*
• *Fuzzy control and intelligent systems*
• *Fuzzy decision making and decision support systems*
• *Pattern Recognition*
• *Neural Networks and Deep Learning*
• *Cognitive Science*
• *Component Analysis*
• *Data & Knowledge Engineering*

Track 3: Intelligent Communications and Networks

• *AI Algorithms*
• *Fuzzy & Neural System*
• *Adaptive agents*
• *Pervasive infrastructure and development*
• *Expert systems*
• *Fuzzy Computing with Words*
• *Fuzzy control and intelligent systems*
• *Fuzzy decision making and decision support systems*
• *Pattern Recognition*
• *Neural Networks and Deep Learning*
• *Cognitive Science*
• *Component Analysis*

Track 4: Signal & Image Processing

• *Image / Video / Multimedia Signal Processing*
• *Audio / Spoken Language Processing*
• *Digital &Multirate Signal Processing*
• *Signal Processing Algorithms and Architectures*
• *Pattern Recognition and Object Tracking*
• *Compressive Sensing and High-Dimensional Statistics*
• *Biomedical Signal Processing*
• *Neuronal Signal Processing*
• *Signal Processing & Network Communication*
• *Radio-frequency identification (RFID) technology*
• *Speech and Audio Processing*
• *Detection and Estimation*
 .Smart Antenna

Track 5: Internet of Things

• *Intelligent Systems for IoT*
• *Environmental Monitoring*
• *Machine to Machine/Device Communications*
• *Network Design and Architecture*
• *Infrastructure Management*
• *IoT and Big Data*
• *Home Automation*
• *Security and Privacy*
• *Social Implications of IoT*
• *Technological focus for Smart Environments*
• *Smart City Case Studies*
• *Data Analysis and Visualization*
• *Architecture for secure and interactive IoT*
• *Blockchain for IoT Security.*
• *Emerging IoT*

Track 6: Internet of Energy & Battery Management System

• *Internet of things (IoT) Applications in Smart Grid*
• *Wide Area Monitoring Systems (WAMS)*
• *Wide Area Control (WAC)*
• *Phasor Measurement Techniques*
• *Smart Power Grid*
• *Power Grid Resilience*
• *Communication Technologies for Smart Grid*
• *Communication Protocols and Layers*
• *Parallel computing for Power System*
• *Actuators and Sensors for Smart Grid*
• *Charging Technologies,*
• *Renewable Energy,*
• *Hybrid Systems,*
• *Computed Tomography to Accelerate Battery Design,*
• *OBC and Wall Mounted Intelligent Chargers.*

Track 7: Electric Vehicles & Smart Energy System
• Electric Vehicles and Components,
• Vehicle Technology,
• Safety, Security and Data Transfer Systems,
• Reliability Engineering For Automotive Systems,
• Special Traction Machines Multi-Phase Axial Flux.
• Grid Modelling
• Smart Transmission & Distribution Technologies,
• Smart Metering,
• Instrumentation and Control Techniques,
• Smart Energy Infrastructure and Storage Technologies,
• AI And Optimization Techniques, Computational Methods.

Track 8: Mechanical Science and Technology Advances
   Instrumentation and Control
   Automation and Mechatronics
   System Dynamics and Simulation
   Aerodynamics
   Turbulence
   Heat and Mass Transfer
   Acoustics and Noise Control
   Applied Mechanics
   Automotive Engineering
   Machinery and Machine Design
   Computational Mechanics
   Mechanical Design
   Dynamics and Vibration
   Manufacturing and Production Processes
   CAD/CAM
   Manufacturing System and Simulation
   Manufacturing Robots
   Product Design
   Additive Manufacturing

Paper Guidelines
1.   The conference will accept regular papers (6 pages), short papers (4 pages), and demo papers (4 pages).
2. Authors are encouraged to compare their approaches, qualitatively or quantitatively, with existing work and explain the strength and weakness of the new approaches. We are planning to invite selected submissions to journal special issues.
3. The proceedings will be submitted to review for inclusion in relevant indexing database such as SCOPUS, CPCI, Crossref (by assigning DOI), Google Scholar etc
4. All papers must be original and not simultaneously submitted to another journal or conference.
5. Instruction should follow the IEEE template. One corresponding author must register the conference and present the paper.
6. Plagiarism below 5% as per IEEE conference norms.
7. Author must submit the plagiarism report, copyright form, camera ready paper and registration form on or before 28.02.2023
8. Abstract 250 words only. Paper should follow the Title, Author Affiliations, Abstract, Keywords, Introduction, Literature Survey, Methodologies, Results & amp;Discussion, Conclusion, Future Work and References
9. References - minimum of 25 references and maximum of 50 references.
10. References must cite in recent years preferably.
11. Paper submission through Google form or Email id.

Important Dates:
Paper submission opens: 10 October 2022
Paper Submission deadline: 25 January 2023
Paper Acceptance Notification: 25 February 2023
Camera ready paper and Registration: 01 March 2023
Conference Date: 24-25 March 2023
Plagiarism: 05%

Registration Fee

Category Registration Fee
Academician : ₹6000 , 200 USD
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Industry : ₹6500 , 250 USD

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Contact us

Dr.S.Kannadhasan.,SMIEEE
Assistant Professor
Department of Electronics and Communiciation Engineering,
Study World College of Engineering
Coimbatore-641 105
Ph: 9677565511,
Email : s.kannadasan@swehg.com,
kannadhasan.ece@gmail.com
kannadhasansuriyan.ece@ieee.org

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