The 15th IEEE International Conference on Green Energy & Smart Systems (IEEE GESS 2024), November 4 ~ 5, 2024, Long Beach, California

Symposium and Workshop Program: https://site.ieee.org/clas-sysc/program

❑ **Symposium (Nov. 4, Hilton Long Beach) – Session A**

Time	Program
9:00 AM	***Welcome:*** General Chair
9:05 AM	***Keynote presentation-1*: *Activating Interdualities and Systemic Orders in Sustainable Energy and Enterprise Systems***; James H. Lambert (IEEE Fellow, University of Virginia - Janet Scott Hamilton and John Downman Hamilton Professor)
10:00 AM	Mingling & Networking
10:20 AM	***Federated Learning-based Resilient Control of Shipboard Power System***; Anway Bose (Temple University, USA), Joseph Amato (Naval Surface Warfare Center, USA), Li Bai (Temple University, USA)
10:40 AM	***Fault Classification in Aircraft Electrical Systems Using Transients and FPGA-Based Deep Learning***; Ian C Guzman, Radu F. Babiceanu (Embry-Riddle Aeronautical University, USA)
11:00 AM	***Implementation of Hardware in Loop Control in Evaluating Non Road Mobile Machines Powertrain***; Markus Rumjanstev, Rasmus Pettinen, Tino Tuominen and Christer Soderstrom; Sahas Bikram Shah (VTT - Technical Research Centre of Finland, Finland)
11:20 AM	***Voltage-Sag Origin Detection in Smart Grids for Enhanced Resiliency***; Ahmed Mustafa, Mohammed E. Nassar, M. M. A. Salama (University of Waterloo, Canada)
11:40 AM	***MATLAB-Based Lightweight Workload Prediction via Machine Learning Models in Distributed Systems***; Ghadeer Al Jufout and Simon Zhang (California State University Long Beach, USA); Hailu Xu (California State University, USA); Saleh Al Jufout (California State University, Long Beach, USA)
12:00 PM	***Lunch* & *Student Poster Presentations***
1:00 PM	***Keynote presentation-2: Autonomous Control of Bio-Inspired Extreme Behaviors in Robotics***; Nak-seung Patrick Hyun (Purdue University - Assistant Professor, IEEE GESS 2024 - TPC Chair, Harvard University - Research Associate, Georgia Institute of Technology – PhD)
1:50 PM	***Keynote presentation-3: California: Still Innovating After All These Years***; Cody Taylor (California Energy Commission – Manager of the Industry & Carbon Management Branch in R&D Division)
2:40 AM	Mingling & Networking
3:00 PM	***Medium Voltage Three-Phase Interleaved Three-Level Bidirectional DC-DC Battery Energy Storage Converter for Wind Turbine***; Yunjun Ling (UC Berkeley, USA); Changyuan Zhang (WindSun Science Technology, China); Xuguang Li (Shanghai Jiaotong University, China)
3:20 PM	***Dynamic Signal Timing Optimization for Left-Turn Maneuvers via V2I and V2V Communication***; Pedro Herrera, Avi Jagdish and Tairan Liu (California State University, Long Beach, USA)
3:40 PM	***A Real-Time Traffic Monitoring System based on YOLOv8 for Vehicle Detection and Classification***; Jimwell Castillo, Xunfei Jiang, et al. (California State University, Northridge, USA)
4:00 PM	***Impact of Reward Function Selection on DQN-Based Traffic Signal Control***; Avi Jagdish and Tairan Liu (California State University, Long Beach, USA)
4:20 PM	***An Efficient Framework to Enhance Single-Charge Performance of Lithium-Ion Batteries***; Christopher Sayers and Ehsan Naderi (Arkansas State University, USA)
4:50 PM	***Award Ceremony: Best Paper Awards, Service Awards, Poster Competition Awards***

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❑ **Symposium (Nov. 4, Hilton Long Beach) – Session B**

Time	Program
9:00 AM	***Welcome***: General Chair
9:05 AM	***Keynote presentation-1*: *Activating Interdualities and Systemic Orders in Sustainable Energy and Enterprise Systems***; James H. Lambert (IEEE Fellow, University of Virginia - Janet Scott Hamilton and John Downman Hamilton Professor)
10:00 AM	Mingling & Networking
10:20 AM	***Optimization of Net-Zero Energy Solutions in Saudi University Campuses***; Basil Bin Kasim, Mohammed Alogeil and Walied Alfraidi (Imam Mohammad Ibn Saud Islamic University, Saudi Arabia)
10:40 AM	***Optimal Dynamic Operation of Electrolyzers Considering Power Demand of Peripheral Devices***; Martin J. Winter, Gernot Schullerus, Antony Dominic and Thorsten Zenner (Reutlingen University, Germany)
11:00 AM	***Community-Based Resilience of Distribution Systems Against Extreme Weather: A Time-Sharing Framework***; Bo Tu, Kenneth McDonald, Zhihua Qu, Marwan A. Simaan, Kristopher Davis and Kelly Stevens (University of Central Florida, USA)
11:20 AM	***Forecasting Hot Water Consumption Demand for Residential Dwellings Using Hybrid Classical Regression***; Ibrahim Ali Kachalla and Christian Ghiaus (CETHIL UMR 5008, INSA Lyon, France)
11:40 AM	***Investigating the Impact of Electric Vehicle Charging Loads on CSUN's Electric Grid***; Mohammad R. Narimani; Daniel G. Aguilar, Logan Dehay, Jahn Aquino, Erik Jensen, Juan Rodriguez, Silvia Carpitella, kourosh sedghisigarchi and Xudong Jia (California State University Northridge, USA)
12:00 PM	***Lunch*** & ***Student Poster Presentations***
1:00 PM	***Keynote presentation-2: Autonomous Control of Bio-Inspired Extreme Behaviors in Robotics***; Nak-seung Patrick Hyun (Purdue University - Assistant Professor, IEEE GESS 2024 - TPC Chair, Harvard University - Research Associate, Georgia Institute of Technology – PhD)
1:50 PM	***Keynote presentation-3: California: Still Innovating After All These Years***; Cody Taylor (California Energy Commission – Manager of the Industry & Carbon Management Branch in R&D Division)
2:40 AM	Mingling & Networking
3:00 PM	***A Comparative Study on Partial Discharge and Dielectric Strength of MMEI Flat Samples under AC and DC Condition at Atmospheric Pressure***; Saikat Chowdhury, Anoy Saha, Md A. Rahman and Mona Ghassemi (University of Texas - Dallas, USA)
3:20 PM	***Solar-Powered EV Charging Station with Battery Energy Storage System Integration***; Afshin Balal, Tom Reid and Rob Stewart (Entrust Solutions Group, USA)
3:40 PM	***Evaluating Dibenzyltoluene as a Dielectric Liquid for Encapsulation in High Voltage, High Power Density (U)WBG Power Electronics Modules***; Pujan Adhikari, Easir Arafat and Mona Ghassemi (University of Texas - Dallas, USA)
4:00 PM	***Automated Charging of Battery Electric Vehicles on Trains to Accelerate the Mobility Revolution***; Armin Buchroithner, Christof Birgel, et al. (Graz University of Technology, SSC Railtec GmbH, RCC Railway Competence and Certification GmbH, Easelink GmbH, Austria)
4:50 PM	***Award Ceremony: Best Paper Awards, Service Awards, Poster Competition Awards***

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- ❑ **Workshop (Nov. 5, Niggli Conference Center (ECS-312) at California State University Long Beach)**
- ❑ **EV Demo Truck at Parking Space of the back of ECS building 9:00 am – 3:00pm**

Time	Program
9:00 AM	**Building a Zero-Emission Vehicle Ecosystem**; **Moderator**: Dr. Tyler Reeb (College of Professional and Continuing Education, CSULB – Executive Director) **Panelists**: Bill Beverly (Evolectric - Co-Founder / Co-CEO), Jacquelyn Birdsall (Toyota – Senior Engineering Manager), John Keisler (Sunstone Management – CEO), Cory Shumaker (Hyzon Motors - Head of Business Development), Marc Deutsch (American Honda Motor Company - Manager) https://csulb.zoom.us/j/7923303746?omn=82748373650
10:40 AM	**Break and EV Demo**
11:00 AM	**Mobile DC Fast Charging of EVs from Scratch - All the Pieces**; James Burns, (Transpower - Founder) https://csulb.zoom.us/j/7923303746?omn=81015178204
12:00 PM	***Casual Lunch - Mingling and Networking***
1:00 PM	**Introduction to Hydrogen Mobility;** Edward Youn (Clear Skies – Principal Engineer) https://csulb.zoom.us/j/7923303746?omn=86183515336
1:45 PM	**Using Real-Time Machine Monitoring to Realize Process-Level Energy Optimization;** Zakary Smith (SensFlo – Co-Founder / CEO) https://csulb.zoom.us/j/7923303746?omn=83877708900
2:30 PM	**Current state of AI Research and Application;** Yingqi Xiong (Microsoft – Senior Applied Scientist) https://csulb.zoom.us/j/7923303746?omn=84733327207
3:15 PM	**Enhancing Electric Vehicle Reliability through Predictive Maintenance Using Advanced Data Analytics;** Yu-Wei Chung (Ford – Research Engineer) https://csulb.zoom.us/j/7923303746?omn=85851483243
4:00 PM	**GenAI Cloud Infrastructure;** Samir Katte (Microsoft – Senior Software Engineer) https://csulb.zoom.us/j/7923303746?omn=84494167998
4:45 PM	***Mingling and Networking***
5:10 PM	***Finishing Workshop***

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