ACM e-Energy 2018, Karlsruhe, Germany

EV-Sys 18 workshop

Electric Vehicle Systems, Data, and Applications

12-15 June 2018, Karlsruhe

CALL FOR PAPERS

ACM e-Energy Workshop

on Electric Vehicle Systems, Data, and Applications

Chairs

Angelos Amditis
Research Director, ICCS, Greece

Robert Basmadjian, Replacing Professor, Chair of Security in Information Systems, University of Passau, Germany

Technical Committee

Christina Anagnostopoulou, (ICCS, Greece)
Andrew Winder (ERTICO ITS Europe, Belgium)
Jörg Küfen (FKA, Germany)
Selini Hadjidimitriou (ICOOR, Italy)
Johannes Faehndrich (TU Berlin, Germany)
Thomas Walz (IBM, Germany)
Sid C-K Chau (Masdar Institute)
Erik Wilhelm (Kyburz)
Albert Lam (University of Hong Kong)
Prashant Shenoy (UMass)
Maria Perez Ortega (GFI Belgium)
Florian Kutzner (University of Mannheim, Germany)
Michal Jakob (CVUT, Czech Republic)

The workshop is organised by NeMo and ELECTRIFIC H2020 European Projects in conjunction with the ACM e-Energy 2018

These projects have received funding from the EU's Horizon 2020 research & innovation programme under grant agreements no 713794 and 713864 respectively.

Electromobility is an essential component in decarbonising road transportation and mobility. But still, there are obstacles in the wide acceptance of Electric Vehicles (EVs). The purpose of this Workshop is to examine the latest development of areas that are expected to play a major role towards enhancing EV performance. Hence issues related to methodological concepts through the improvement of the battery management system (BMS), the extensive use of information and communication technologies (ICT) to increase energy efficiency and thus the range of the vehicle, the revision of the electric and electronic architecture to reduce complexity and the number of components and interconnections, whilst improving energy efficiency, functionality and modularity and the development of tools and networks to enable the interoperable charging and services provision to owners of EVs, will be thoroughly examined.

List of Topics

Workshop topics include but are not limited to:

- Novel Battery Management System (BMS) designs with improved thermal management, power density and life time, safety and reliability.
- Models, simulation and performance evaluation tools for BMS improvement.
- Test methodologies and procedures to evaluate the functional safety, reliability and lifetime of battery systems.
- Integration of the overall cycle of EV energy management into a comprehensive EV battery and ICT-based re-charging system management.
- Digital support for EVs (i.e. common information model, market place interaction and service provision based on wireless / power line communication interfaces, roaming management, energy consumption and supply as well as cost).
- Interoperability of EVs with the communication infrastructure and electricity grid regarding locally deployed smart-grid and smart-metering systems while investigating arising operational issues.
- Key performance indicators (KPI) for grid-friendly charging process with a special focus on power quality modelling and algorithms.
- New metrics, business models and methodologies for incentivizing EV users.
- Novel algorithms and optimization strategies for EV charging process.

Important Dates

- Submit papers for review by:

13 April 2018 (FIRM DEADLINE)

- Acceptance notices sent:

27 April 2018

Final papers due:

7 May 2018

Author Guidelines:

Submit a paper to this workshop through the following link: https://evsys18.hotcrp.com

8-page high-quality full technical papers which at the time of submission are not under review and have not already been published or accepted for publication elsewhere are solicited.
2 pages Poster/Demo descriptions, showcasing work in progress are also encouraged.

Papers should follow the official ACM Proceedings format. Accepted papers will be published within the ACM e-Energy conference proceedings.

More Information

Please email to:

- a.amditis@iccs.gr
- robert.basmadjian@uni-passau.de
- p.brousta@iccs.gr

or refer to the **ACM e-Energy** page and **EV-Sys '18** Workshop page.