

# TEC+2022

## PANEL 2: BATTERY CHEMISTRY AND ALGORITHM ADVANCEMENTS FOR ELECTRIC VEHICLES AND AIRCRAFT 15 JUNE 2022 | 2 PM - 3:40 PM



The onboard battery technology is an inevitable topic when it comes to transportation electrifications. Not only does it primarily determine the driving range but also it has a high impact on charging speed. Advanced battery cell and pack designs and sensing strive to minimize manufacturing cost and maximize the hardware capability. Complimentarily, unlocking the battery's full potential requires accurate and optimized battery models and algorithms. The experienced academic researchers and seasoned industrial professionals are invited to discuss the tradeoffs of designing and manufacturing battery cells and packs, battery algorithm design strategy based on various cell chemistries, challenges of fast charging, advanced battery sensing, and the future trends of battery chemistry and algorithm improvements.

### Speakers:



#### YING SHI

Technical Specialist,  
Battery Software &  
Control -  
Lucid Motors



#### AUSTIN DULANEY

Principal Data Scientist at  
Liminal Insights



#### HUAZHEN FANG

Associate Professor,  
University of Kansas



#### SHASHANK SRIPAD

Battery researcher and PhD  
Candidate at Carnegie Mellon  
University



#### YUZHANG LI

Assistant Professor,  
University of California,  
Los Angeles