

Multiple Ph.D. Positions at the University of Alabama ECE Department

Description: Dr. Lusha Wang's group at the University of Alabama has multiple openings for Ph.D. positions starting in **Fall 2023/Spring 2024** on **power system/transportation electrification**. These positions are fully funded, including tuition, stipend, and medical insurance. Selected candidates will work with Dr. Wang on the following topics:

- 1) Transportation electrification including large-scale EV impact analysis, charging infrastructure planning, V2G service modeling.
- 2) Power distribution system resilience and protection including voltage support, outage restoration, and anomaly detection.
- 3) Distributed energy resources integration including coordination of multiple DERs, grid ancillary services evaluation.

Successful candidates should be self-motivated and have strong mathematical and programming backgrounds. Desirable qualifications include background in one of the following areas: electrical engineering, mathematics, control, computer science, optimization, and other related areas.

Bio: Dr. Lusha Wang is an incoming Assistant Professor with the Department of Electrical and Computer Engineering at the University of Alabama. She is currently a Postdoctoral Appointee in the Energy System Division, Argonne National Laboratory. Dr. Wang received the Ph.D. degree in Electrical Engineering from the Washington State University, Pullman, WA, USA in 2022 and the B.E. degree in Electrical Engineering from Wuhan University, Wuhan, China in 2016. She has been a research aide with the Energy System Division, ANL in 2019 and 2020. Dr. Wang has participated in multiple DOE projects as a technical leader, developed an industry-level large-scale distribution model conversion tool, and participated in several DOE funding proposals as ANL Principal Investigator (PI). Dr. Wang has a strong collaboration with multiple National Labs (ANL, PNNL, NREL), industry companies (Exelon, ComEd, Eaton, Hitachi) and DOE Offices (VTO, EERE, SETO). She received the *IREDEFINE Professional Development Award* and the *IEEE PES Grid Edge Technologies 3-Minute Ph.D. Dissertation Challenge Finalist* in 2023.

About UA: The University of Alabama, located in Tuscaloosa, Alabama, is a public research university founded in 1831. It is the flagship campus of the University of Alabama System and one of the oldest, largest, and most beautiful campuses in the United States. The UA is classified as an **R1** institution, and its College of Engineering is ranked **99th** in the United States in 2023 (U.S. News & World Report). The Advanced Vehicle Technologies Center in ECE department at the UA has a longstanding research partnership with the German Mercedes-Benz R&D department and local automotive manufacturing industry. The city of Tuscaloosa is an hour's drive to Birmingham, three hours to Atlanta, and three and a half hours to the Gulf of Mexico. The UA's football team, known as the Crimson Tide, consistently ranks among the top five in College Football and has achieved numerous honors and accolades.

Contact: Applicants who are interested can send email to Dr. Wang at lusha.wang@ua.edu with the subject "**PhD Application + name**", enclosing CV, transcript, and short description about research experience (if any) and interests.