SDSU San Diego State University

San Diego State University and UC San Diego Joint PhD Program (Electric Energy Systems)

One fully funded PhD position is available in Dr. Tong Huang's research group in the Department of Electrical and Computer Engineering (ECE) at San Diego State University (SDSU). Dr. Huang's research group provides technical solutions that enhance the resilience of electricity infrastructure. Specifically, the research focuses on 1) **data analytics**, 2) **cyber-physical security**, and 3) **modeling and control** of IBR-dominated power grids.

Program Description

The successful candidates will join the **joint doctoral program** (JDP) offered by the departments of ECE at the University of California, San Diego (UCSD) and SDSU in Fall 2026 (time is flexible). The PhD diploma will be issued jointly by UCSD and SDSU. The PhD students will be mentored by Dr. Huang and co-advised by a faculty member at UCSD. More information can be found here. Dr. Huang's research group will provide the PhD students with **full financial support** (including tuition and salary). The research group is also actively recruiting for partially funded Master of Science (M.S.) students.

About the Mentor

Dr. **Tong Huang** is an Assistant Professor (tenure-track) in the Department of ECE at San Diego State University. Before joining SDSU, he was a postdoctoral associate at MIT. He received his Ph.D. degree from Texas A&M University in 2021. His industry experience includes an internship with ISO-New England in 2018 and an internship with Mitsubishi Electric Research Laboratories in 2019. As the first author, he received two Best Paper Awards at the 2020 IEEE PES General Meeting and the 54-th Hawaii International Conference on System Sciences. His research results have been published in the top journals in the field of electrical engineering (e.g., IEEE Transactions on Power Systems, IEEE Transactions on Smart Grid, and Proceedings of the IEEE). His research focuses on data analytics, cybersecurity, and modeling and control of power grids with deep renewables. Dr. Huang's research group closely collaborates with the U.S. national labs (e.g., PNNL, ORNL, and ANL), other U.S. universities (e.g., MIT), and local utilities. The members in Dr. Huang's group will have opportunities to intern or work at renowned national labs and leading electric power companies, and to visit other universities as visiting scholars.

About SDSU

San Diego State University was founded in 1897, and it is a R1 research university. The university is ranked No.109 among national universities and No. 52 among top public universities in the U.S. by the 2024 U.S. News & World Report. The university is in San Diego, a top tourist attraction and resort area in California.

Application Requirements

a) Master's (Preferred) or Bachelor's degree in electrical engineering, computer Engineering, or relevant majors; b) Strong programming skills (MATLAB/Simulink, & Python); c) Solid background of electric power systems, power electronics, and control; d) Having research publications is a plus; e) Finalize your application by Dec. 15 2025.

Please email your CV, transcripts, and publications (if any) to thuang7@sdsu.edu