### **BOYA HOU**

4038 ECE Building, 306 North Wright Street, Urbana, IL 61802 | Email: boyahou2@illinois.edu |

### **Education**

**University of Illinois, Urbana-Champaign**PhD student in Electrical and Computer Engineering

GPA: 3.97/4.00

Advisor: Subhonmesh Bose

University of Illinois, Urbana-ChampaignDecember 2019Master of Engineering in Electrical and Computer EngineeringGPA: 3.93/4.00

**Zhejiang University**Bachelor of Engineering in Electrical Engineering
GPA: 3.89/4.00

## **Current Appointment**

Research Assistant, Department of Electrical and Computer Engineering, University of Illinois, Urbana-Champaign.

Advisor: Subhonmesh Bose.

#### **Research Interests:**

My research interests are in the areas of data-driven learning and control in single/multi-agent setting, with a focus on applications to electric power grid and sustainable transportation.

## **Publications and Preprints**

- **B.** Hou, S. Sanjari, N. Dahlin, S. Bose, U. Vaidya, "Sparse Learning of Dynamical System in Reproducing Kernel Hilbert Space: An Operator-Theoretic Approach", accepted at ICML 2023.
- **B. Hou**, A.Reddy Ramapuram Matavalam, S.Bose, U.Vaidya, "Propagation of Uncertainty Through System Dynamics in Reproducing Kernel Hilbert Spaces with Data", presented as poster paper at ACC 2023.
- **B. Hou**, S. Sanjari, N. Dahlin, S. Bose, "Compressed Decentralized Learning of Conditional Mean Embedding Operators in Reproducing Kernel Hilbert Space", presented at AAAI, 2023.
- **B. Hou**, S. Bose and U. Vaidya, "Sparse Learning of Kernel Transfer Operators", presented at the Asilomar Conference on Signals, Systems, and Computers, 2021.
- **B. Hou**, S. Bose, L. Marla and K. Haran, "Impact of Aviation Electrification on Airports: Flight Scheduling and Charging", under submission at IEEE Transactions on Intelligent Transportation Systems.
- **B. Hou**, S. Bose, and K. Haran, "Powering Electric Aircraft at O'Hare Airport: A Case Study", presented at the IEEE Power and Energy Society General Meeting, 2020.

## **Teaching**

Fall 2021, Teaching Assistant, ECE 365 Data Science and Engineering, UIUC



#### Boya Hou

PhD Candidate
Department of Electrical and Computer Engineering
University of Illinois, Urbana-Champaign

## **Other Academic Activity**

• Visiting Undergrad Scholar, Mechanical and aerospace engineering, UCLA. July 2017-Sep 2017

• Organizing Weekly Workshop on Function Analysis.

July 2021- Dec 2021

# **Technical Skills**

Languages: Python, C, C++

Applications: OpenAI Gym, Matlab, Simulink, Sklearn, CVXPY, OrCAD, LabVIEW.

## **Award**

Mavis Future Faculty Fellows (MF3), 2023-2024

• AAAI student scholarship, 2023

• Second place in United States Association for Energy Economics (USAEE) Case Competition, 2019.

• Outstanding Undergraduate Thesis of Zhejiang University, 2018.

• First-Class Scholarship of Zhejiang University, 2015.