LING YUNXIAO

Mobile: +65 9806 2098 | Email: yling004@e.ntu.edu.sg
2 Jurong Lake Link,10-09 641857

EDUCATION

NTU-TUM Singapore
Master of Science July 2021—Now

- Major: Green Electronics
- Joint degree program between Nanyang Technological University and Technical University of Munich.

University of Birmingham Birmingham, UK
Bachelor of Engineering with First Class Honors Sept 2019 – Jun 2021

- Major: Electrical and Electronic Engineering
- Scholarship of 20% tuition fee discount in University of Birmingham.

Southwest Jiaotong University Chengdu, China
Bachelor of Engineering Sept 2017 – Jun 2019

- Major: Electrical Engineering and Automation

RESEARCHING

AI-Powered Electricity Grid Control and Operation Singapore
Research Assistant under *Dr Chenye Wu, CUHKSZ* Apr 2023—Aug 2023

- Assist to develop the effective end-to-end learning framework for economic dispatch in power system.
- Investigating the structure of stochastic optimization in economic dispatch and use the notion of task specific criteria to better utilize the data.
- Establish the relationship between the distribution of the predicted load and the optimal total generation, use binary search to obtain the control policy efficiently.
- Familiarize myself with python-based machine learning packages, PyTorch and TensorFlow.

NTU-Sunseap Singapore
Research Assistant under *Prof Gooi Hoay Beng(IEEE FELLOW), NTU* Jul 2022—Apr 2023

- Developing the local control theory of solar PV smoothing algorithm to mitigate low ramp rate intermittency.
- Developing the Hierarchical energy management system to schedule and dispatch the system's operation and optimize the system's operation considering solar intermittency and economic behavior.
- Developing the system database for saving and prediction data to enable system operation.
- Developing the GUI interface to control and view data at real time.
- Developing all hardware with lantronix web server to control all hardware wirelessly.

Semiconductor Process and Device Simulation Singapore
Student under *Prof Zhou Xing, NTU* Dec 2021—Jan 2022

- Develop the process model of diffusion, oxidation and implantation. Set up the process variables: doping profiles, junction depths and oxide thickness. After this, simulate a given sub-micron CMOS process recipe and observe the layer structures and performance parameters.
- Implement a computer experiment to learn the scaling characteristics such as varying gate length if the given sub-micron technology. Find the influence of process variations on device performance parameters.
- Familiarize myself with semiconductor simulation software and process.

EXTRACURRICULAR ACTIVITIES

Member of Sports Department, Student Union, SWJTU Oct 2017 – Nov 2019
Assistant Engineer, Southwest Electric Power Design Institute Jul 2020 – Aug 2020
Assistant Engineer, Electric Power Research Institute, State Grid China Jun 2020 – Jul 2020

ADDITIONAL INFORMATION

- Language Skills: Mandarin Chinese (native), English (fluent)
- Computer Skills: Python(strong), C++, MATLAB, Altium Designer, Verilog, Multisim
- Other Skills: Lathe using, Badminton Referee
- Interests: Badminton, Football, Hiking