Danyu Hu

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EDUCATION
Cornell University, College of Engineering, Ithaca, NY

Expected: May 2022 - Bachelor of Science: **Electrical and Computer Engineering**
         Dec 2022 - Master of Engineering: **Electrical and Computer Engineering**

Relevant Courses: Evolutionary Algorithm and Game Theory; Stochastic Control**;** Machine Learning; Big Data Technology; System Engineering & Optimization; Digital Signal Analysis; Computer Vision; Embedded System; Microcontrollers; Microelectronics; Probability and Statistics; Finance; Marketing; Financial Accounting

PROFESSIONAL EXPERIENCE
Cornell Center for Social Science, *Technology Workshop Consultant*   **March 2022-Present**
Bank of America, Dallas, TX, *Mainframe Monitoring Intern*   **June. 2021-August. 2021**
- Learned about mainframe platforms (CICS, TEP, TADz, APView, TSO) in banking industry
- Learned to write and submit JCL jobs for various purposes
- Performed monitoring tasks on TEP and data management tasks on DB2

Microsoft TEALS Volunteer Program, Virtual, *CS Teacher*   **June. 2020-May. 2021**
- Computer Science co-teacher at a high school in Buffalo, NY
- Held weekly office hour to help student learn Scratch and Python
- Virtually worked with other volunteers to help high school students develop interests in computer science

Cornell Center for Material Science, *Administrative Assistant*   **Jan. 2019-Jan. 2020**
- Helped organize conferences and symposiums
- Learned about local startup companies
- Maintained the organization's website and business data

LEADERSHIP EXPERIENCE
Cornell University Biomedical Device Project Team, *Electrical Team Lead*   **Oct. 2019-May. 2020**
- Scheduled and led weekly meetings (for reflections and future planning) and technical workshops
- Encouraged communication and innovation within the team

RESEARCH EXPERIENCE
MEng. Project, Cornell University, *Master's Student Researcher*   **Feb. 2022-Present**
- Building a simulation platform to assess and improve Federated Learning Algorithms

Schaffer and Nishimura Lab, Cornell University, *Undergraduate Researcher*   **June. 2020-May. 2021**
- Helped build a virtual reality system on mice to better study Alzheimer's Disease
- Worked with raspberry pi, display drivers, and optical tools

The Institute of Remote Sensing and Digital Earth, Beijing, China, *Undergraduate Researcher* **July. 2019-Aug. 2019**
- Learned basics of Artificial Intelligence, including Deep Learning and Semantic Segmentation
- Built a Pytorch ML model that automatically recognized and labeled sewage plants on satellite map

CAMPUS INVOLVEMENT
Alpha Omega Epsilon Engineering Professional Sorority, Cornell University, *Member* **Nov. 2018-Present**

SPECIALIZED SKILLS
Programs: Python, Java, SQL, MATLAB, C Language, Verilog, R Studio, HTML, COBOL, REXX, GD Script
Technical Knowledge: Dynamic Programing, Semantic Segmentation, K-Means Clustering, Image Processing, Optimization, Signal Analysis, Website Creation, Data Analysis, Terminal, Linux, Jupyter Notebook, Raspberry Pi, Arduino, Circuitry, Microcontrollers, Display Drivers, Mainframe, TADz, TEP, CICS, APView, DB2, IBM z/OS
Business Knowledge: Finance, Financial Accounting, Marketing, Micro-economic, Sociology
Past Projects Links: https://pages.github.coecis.cornell.edu/dh573/ECE3400-Danyu/
         https://pages.github.coecis.cornell.edu/ece3140-sp2021/dh573-mce54/