Bing-Yuan (Eric) Hsieh

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Education

University of Illinois at Urbana-Champaign

- B.S. in Statistics and Computer Science, graduating in Spring 2022
- GPA 3.96 / 4.00
- Dean's List for Fall 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021

Experiences

NCSA SPIN Intern

Apr. 2021 – present

- A selective internship program by the National Center for Supercomputing Applications
- Develops AI System for classification of wildlife behaviors in conservation footage

Numerical Methods Course Assistant

Aug. 2020 – Dec. 2020

- Hosted office hours, monitored Q&A board, provided feedback on materials

HackIllinois Staff Back-end Developer

Sep. 2019 – May. 2020

- Developed API backends for authorization, database access, and event dashboard with MongoDB, Go, and AWS
- Participated in weekly team meetings, devoted ~8 hours weekly

Projects

COVID-19 Tracker

Aug. 2020

- A real-time, interactive map visualization of COVID-19 cases developed using React.js

Face Generation with GAN

Nov. 2020

- Trained and compared the performances of GAN and LSGAN models on the CelebA dataset. Implemented spectral normalization functions and analyzed its effect on mode collapse. This is a class project.

Google Scholar Visualization

Jan. 2020 – May. 2020

- A web-based Google Scholar database explorer, featuring graph visualizations, article recommendations, and data editor.
- A team project built with Express.js, React, MySQL, Neo4j, and deployed on AWS, featured as the top five projects in the course

Face to Sketch Generation

Sep. 2019 – Jan. 2020

- A team project on sketch generation from portrait photos developed with Python. Investigated classical as well as GAN approaches

Skills

- Go, Python, C, C++, Java, Linux Kernel Modules, TensorFlow, PyTorch, pandas, NumPy,
- Distributed Systems, Operating Systems, Systems Programming, Database Systems, Applied Machine Learning, Deep Learning, Algorithms, Data Structures, Computational Photography, Probability & Statistics, Numerical Methods, Real Analysis

Languages

- Mandarin (native), English (professional), French (A2), Japanese, Taiwanese