XINLONG YIN

+1(734)882-9361 ◇ xyin68@gatech.edu ◇ https://connoryin.github.io ◇ https://github.com/connoryin
Atlanta, GA 30318

EDUCATION

Georgia Institute of Technology *December 2022*
Master of Computer Science *Cumulative GPA: **0.0/4.0***

University of Michigan, EECS (Transferred form SJTU after 2nd year) *May 2021*
Bachelor of Science in Engineering in Computer Engineering *Cumulative GPA: **3.924/4.0***

Shanghai Jiao Tong University (SJTU) *August 2021*
Bachelor of Engineering in Electrical and Computer Engineering *Cumulative GPA: **3.47/4.0***

Selected Coursework: Distributed Systems, Computer Networks, Operating Systems, Database Management Systems, Computer Security, Compiler Construction, Data Structures & Algorithms, System Design of a Search Engine, Machine Learning

SKILLS

Languages: C++, C, Python, Golang, HTML, CSS, Javascript, SQL, Java, NoSQL, Typescript, R, C#
Frameworks/Tools: React, Flask, MySQL, SQLite, AWS, AZURE, GCP, Git, Linux, TensorFlow, PyTorch.

PROJECT EXPERIENCE

System Design of a Search Engine January 2021 - April 2021
University of Michigan *Instructor: Prof. Nicole Hamilton*

- Developed a distributed crawler using C++ that can download 2200 web-pages per second while obeying the "robots.txt" rule, and automatically recover from crashes by check-pointing the status data every 10 minutes.
- Designed a communication protocol that allowed the servers to cooperate and crawl unduplicated web-pages, and seamlessly accept new servers.
- Deployed the crawler onto 11 AWS and AZURE servers, and downloaded 500 million web-pages in 5 days.

Financial Services Website January 2020 – December 2020
Multidisciplinary Design Program at Umich, Sponsored by Principal Financial Group, Inc. *Sponsor Mentor: Tony Tavegia*

- Built a one-stop information website of benefit packages with a cost estimator and a forum using React, Flask, and Agile software development methods.
- Developed "post", "delete", "like", "bookmark", "comment", and "filter" features on the forum, and stored the related data into MySQL database.
- Deployed the website onto Google Cloud Platform, and used CircleCI to enable automatic build, test, and deployment.

Learning Management System May 2021 – August 2021
Capstone Design Program at SJTU, Sponsored by ByteDance Ltd. *Faculty Mentor: Prof. Jigang Wu*

- Built a mini-program running on the Feishu App that enables course selection, posting and receiving announcements and assignments, event notification, attendance checking, and automatic generation of Timetable.
- Developed the REST APIs using Flask, and designed the MySQL tables that satisfy BCNF to store the data of courses.
- Deployed the MySQL database and Flask onto the Alibaba Cloud.

RESEARCH EXPERIENCE

Cyber-attack Simulation January 2020 - April 2020
Research Assistant at Network Research Group, UMich *Mentor: Prof. Ranjan Pal, Prof. Mingyan Liu*

- Developed a GUI app using PyGTK that simulates the infection and attack process of cyber-attacks with SIS and SIRS models.
- Analyzed the loss of attacks using GARCH Model, QQ-plot, and Autocorrelation Function.
- Published my work in IEEE/INFORMS Winter Simulation Conference, IEEE IoT Journal, and ACM Transactions of Management Information Systems (TMIS).

Learning from Label Proportions May 2020 - August 2020
Research Assistant at Network Research Group, UMich *Mentor: Prof. Ranjan Pal, Prof. Mingyan Liu*

- Devised a semi-supervised deep learning model with TensorFlow that uses knowledge of distributions to predict individual labels.
- Combined GAN with Learning from Label Proportions to explore the underlying distribution of datasets to boost accuracy.
- Achieved around 30% improvement in object labeling accuracy compared to the state-of-art method (DLLP).

SELECTED HONORS AND AWARDS

1. 2021 EECS Undergraduate Outstanding Research Award at the University of Michigan
2. Dean's List and University Honors at the University of Michigan in 2020 and 2019
3. 2017-2018 Shanghai Jiao Tong University Scholarship