Felix Hu

314-691-9198 | felix.hu@duke.edu | linkedin.com/in/felix-hu | github.com/felixwho | felixwho.github.io

EDUCATION

Duke University *2020-2023*
Majors: Computer Science, Math *GPA: 3.96*
Washington University in St. Louis (transferred) *2019-2020*
Majors: Computer Science, Math *GPA: 4.0*

RELEVANT COURSEWORK (* indicates graduate level course)

Data Structures and Algorithms, Analysis of Algorithms, Machine Learning, Machine Learning Algorithms*, Artificial Intelligence*, Full Stack Development*, Databases, Statistics and Data Analysis, Advanced Probability, Linear Algebra, Real Analysis, High Dimensional Data Analysis, Intermediate Finance

STUDENT ORGANIZATIONS

Duke Catalyst Tech Society, ACM ICPC Team Member, WashU Entrepreneur Society, WashU Chemistry Tournament Outreach Committee

EXPERIENCE

Facebook
Software Engineering Intern with Ads Delivery Intelligence group *May 2021 – Aug 2021*
- Designed C++ ads ranking system that saves 4% of memory in the ads serving pipeline, all while increasing the quality of the ad types that make up 60% of Facebook revenue
- Initiated a separate change in ad filter logic responsible for processing over 28 million ads per day

Duke University
Student Researcher *Jan 2021 – Now*
- Working under Prof. Neil Gong to produce Python MXNet frameworks for countering and retraining against byzantine attacks in federated machine learning settings

L3Harris Technologies
Software Engineering Intern with Ad-Hoc Networks group *Jun 2020 – Aug 2020*
- Developed C++ software that passes data through mesh networks and facilitates inter-vehicular communication
- Overhauled legacy code in L3Harris' backend scalable framework to ensure robustness and modernize library for new components; refactored an additional ~3k lines of code

Washington University School of Medicine
Research Intern *Apr 2019 – Dec 2020*
- Contributed to MuSiC2, an open source R software that statistically analyzes genomic data and predicts which significantly mutated genes likely promote cancer development in patients
- Work on MuSiC2 presented at American Association for Cancer Research conference

PROJECTS

Safinia (WashU-funded health initiative) *Apr 2020 – Dec 2020*
- As tech lead, I spearheaded a natural language processing-driven educational platform for STDs; used SpaCy and TensorFlow to determine speech intent and generate knowledge graphs from medical websites; My role involved managing teams, ML model training, presenting work to VCs, talking to schools in St. Louis

Buzzfund *Feb 2020 – Aug 2020*
- Developed a trading service in Python that uses machine learning algorithms such as random forest and boosting on options chains from TD Ameritrade's API to assess trade decisions based on unusual options activity
- Extensive backtesting used to validate signals which saw portfolio gains by ~50%

TECHNICAL SKILLS

- Proficient: Java, C++, Python, MXNet
- Advanced: Node.js, PHP, HTML, CSS, MySQL, Javascript, Git, AWS EC2, R, Objective-C

AWARDS

USA Computing Olympiad Gold Division 2017
USA Biology Olympiad Top ~30 2019