Jessica Sun



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Education

Massachusetts Institute of Technology

Expected 2021

B.S. in Computer Science and Molecular Biology, HackMIT Co-Director

Relevant coursework in algorithms and data structures, probability, and embedded systems

Experience

Technology Summer Analyst, Barclays

Summer 2020

- Migrated production reporting pipeline for counterparty risk from on-premise Hadoop cluster to AWS
- · Communicated design and architecture to other risk teams to increase scalability of data queries
- Migration results in reduction of operating costs by \$XXM

Computational Engineering Intern, Moderna

Summer 2019

- Implemented an MHC-binding neural network to predict immunogenicity, improving run time by 400x
- Developed a web app to analyze binding predictions in major drug pipelines
- Built interactive visualizations using Altair to identify mutations producing off-target effects

HR Technology Intern, Mastercard

Summer 2018

- · Developed a chatbot to answer HR policy questions, significantly reducing HR ticket workload
- · Designed bot to collect user experience feedback and return personal data from Workday database
- · Automated case assignment for HR Systems team and integrated acquisition company data in Workday

Research Assistant, Optical Radiology Lab, Washington University School of Medicine

2014 - 2017

- · Developed a novel spatial frequency domain method for fluorescence imaging in tumor detection
- Co-first author on paper published in the Journal of Biomedical Optics (see 2016 Aug; 21(8): 080502)

Extracurriculars

Co-Director, HackMIT

- Organize and run MIT's largest undergraduate hackathon with 1000 students
- · Manage team of 30, lead team meetings, set timeline and shape organizational strategy
- · Generate yearly revenue of \$XXXK, recruit sponsors and speakers, and facilitate admissions and outreach

Fellow, Pear VC

Research specific investment areas, source startups on campus, and advise Pear Dorm companies

Membership Development Chair, Society of Women Engineers

Organize member recruitment, plan trip to the SWE National Conference, and hold community events

Projects

Smart Alarm

· Built an Arduino alarm that uses user movements and sounds to determine snooze length

HeartSmart Socks

Designed a companion app to monitor readings and prevent hospital readmission of heart failure patients

Skills