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 tens of millions of dollars

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 $350K, 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

Python, C++, HTML, CSS, JavaScript, React, SQL, Git, Docker, MATLAB, Figma, Adobe Creative Suite