

Jessica Sun

jessjs@mit.edu | 314-750-5016 | jessicajsun.com

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 Analyst Intern, 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 \$XXXX, 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

Undergraduate Researcher, MIT Media Lab, Community Biotechnology

- Designing a platform for community biology labs to connect and collaborate on research projects

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