# 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
- Migration results in reduction of operating costs by tens of millions of dollars
- Optimized and documented risk-weighted asset calculators used on \$10B+ of assets

### 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**