

Joseph Lai

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Education

Boston University, *Boston, Massachusetts*

Expected Graduation: May 2021

B.S. in Computer Science and Mathematics

GPA: 3.98

Related Coursework: Data Structures and Algorithms, Combinatoric Structures (Discrete Math), Computer Systems, Probability, Analysis of Algorithms, Programming Languages

Technical Skills: Java, Python, C, Haskell, Go, Front-End Web Design, Microsoft Excel, LaTeX

Work Experience

BU CS Department, *Research Assistant*, Boston, MA

January 2019 – Current

- Analyzed social networks using Python and NetworkX and studied correlations between graph manipulation and node centrality among various network models
- Optimized several graph algorithms using Python to scale for large network simulations

Magnolia Prime, *Data Analytics Intern*, Redwood City, CA

August 2017 – January 2018

- Developed a new organizational method using Microsoft Excel and Pivot Tables to categorize product usage data for marketing and product development
- Analyzed clients' platform usage data and presented findings at weekly company-wide meetings
- Planned weekly meetings with primary three clients to maintain relations and to create social media content for marketing strategies

Projects

BUsBot, *Lead Programmer*

December 2018 – Current

- Created FB Messenger chatbot application that reports live BU shuttle information to students
- Used Python to write webhook that processes BU shuttle data into readable response messages
- Used DialogFlow to handle natural language processing for distinguishing user commands
- Led team of four to design program architecture and designated workflow among members

Decentralized Social Network, *Team Member*

January – May 2018

- Used Go to create an IRC application with decentralized backend and browser frontend
- Individually responsible among team of six for developing distributed server communication

Involvement, and Leadership

MakeBU, *Team Member*

January 2018 – Current

- Participated in weekly hack nights, programming workshops, and technology seminars

Gunn Business Club, *President and Founder*

August 2014 – May 2017

- Planned travel logistics and organized test-prep materials for 16 DECA & FBLA competitions
- Grew club from 20 members to 160+ members and managed a 15-person officer team
- 100+ volunteer hours from creating and participating in various community service projects

Boy Scout Troop 14, *Troop Guide*

January 2018 – Current

- 100+ volunteer hours from creating and participating in various community service projects

Honors: Eagle Scout, Dean's List (3.5+ GPA, All Sem.) | **Interests:** Ultimate Frisbee, Rock Climbing