

Joanna Lu

COMPUTER SCIENCE AND STATISTICS

EDUCATION

University of Waterloo Exp. Dec 2019

Bachelor's of Mathematics

Double Major in Computer Science and Statistics, Business Option

Selected Coursework:

Algorithms, Databases, Linear Algebra

Data Analytics, Artificial Intelligence

SKILLS

Languages

Python, C++, C, SQL, R, Java, Javascript

Tools and Frameworks

Git, Hadoop, Hive, Numpy, Pandas,

Spark, Tensorflow, React, Sketch

HONORS AND AWARDS

Google, Grace Hopper Travel Grant Award

For leadership involvements 2018

TD Bank, Hack the North's TD First Prize

Mental health journal project 2017

U. of Waterloo, June Nicholson Scholarship

For academic excellence 2016

American Mathematics Contest, Top 5%

Qualifier for Invitational Round 2015

Euclid Mathematics Contest, Top 10%

Distinction and school champion 2015

PROJECTS

Log(me) 2017

Hack the North, Journal Data Visualizer

- Mental health web journal that uses sentiment analysis and text parsing.

Happy Exam Thoughts 2017

Python Data Mining and Sentiment Analysis

- Mined facebook messages and used NPL to parse and categorize convos using IBM AlchemyLanguage API.

Esc-it 2016

C++ MVC Game with Design Patterns

- Developed text terminal game with characters, dungeons and battles.

Seeking [Software Engineering](#) Internships for Summer 2019

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EXPERIENCE

Google | Google Cloud

May - August 2018

Software Engineering Intern

Seattle, WA

- Built a fault injection framework to test resilience and reliability of Google Compute Engine's Control Plane using Python, RPC and protocol buffers.
- Used stubbing to intercept RPCs to allow the injection of custom faults into backend services in order to uncover and assert behaviour.
- Developed a tracing feature for threading operations and runs in tests.

Yahoo! Inc | Yahoo! Mail

January - April 2018

Software Engineering Intern

Sunnyvale, CA

- Used React and Javascript to develop search segmented controls to render different views of messages, documents, photos within inbox.
- Lead and worked with UX and Product Management teams for search box experimentation designs dropdown suggestions.

SAP SE | In-Memory Database

May - August 2017

Product Management Intern

Waterloo, ON

- Lead communication between development features and consumer feedback to implement deployment strategies/timelines for product life cycle.
- Created interactive data visualizations for win-loss and market analysis using SQL, D3 and Jupyter.

Capital One | Chat Analytics

May - August 2016

Data Scientist Intern

Waterloo, ON

- Built aggregated data pipelines between Redshift and MongoDB for front-end data visualization tools and charts using data mining and SQL and NoSQL.
- Improved text categorization model by 8% for agent-customer chat conversations through model and data test training.
- Queried, mined and constructed SQL tables to clean/restructure raw chat data.

LEADERSHIP AND INVOLVEMENTS

Waterloo Data Science Club | President, Director of Internal Affairs Sept 2016 - Present

- Responsible for events, increasing membership and managing executive team.
- Secured outside sponsorships for club and maintained existing relations.

Google Computer Science Summer Institute | Teaching Assistant June - July 2018

- Assisted and mentored high school students in developing a functioning web platform project as a part of Google's summer tech program.

University of Waterloo Orientation | Head Pink Tie Orientation Leader Feb - Sept 2017

- Responsible for leading the pink tie leaders and acting as the communication between orientation organizers and orientation teams for first-year students.

Acabellas | Soprano Vocalist, Arranger

Sept - April 2016

- Arranged SATB a capella pieces for performance at local venues and concerts.
- Qualified for the International Championship of Collegiate A Capella Choir 2016.