AMY ZHU

Computer Science, BSc. | year 4
amy.zhucchini.ca | a.zhu@alumni.ubc.ca

Technical Skills

- ✧ *Languages:* **Java, Racket, TypeScript/JavaScript, Go, SQL**
- ✧ *Environments:* **Linux, JetBrains IDEs, VSCode, Vim**
- ✧ *Graphics:* **Adobe Photoshop, InDesign, Illustrator**
- ✧ *Other:* **LaTeX, Git, Jira, Crucible**

Technical Projects

DAGQL (Directed Acyclic Graph Querying Language) *09 - 12/2018*

✧ Provide an expressive and intuitive ENBF that interfaces with arbitrary DAG traversal and querying backends as a group course project.

✧ Produced ACM-format academic documents contextualizing the project, establishing supplementary background details, and outlining key technical aspects.

amy.zhucchini.ca *10/2017*

✧ Developed a personalized static website from hand using JavaScript and Bootstrap.

Research Experience

Distributed Mutation Testing *05-2018 - present*

✧ Developed a framework for distributed mutation testing, reasoning about adapting fundamental aspects of distributed systems under Prof. Ivan Beschastnikh.

✧ Running large-scale evaluations to assess feasibility and utility of project.

Immutable Extensions for Synthetic Separation Logic *05-2019 - present*

✧ Investigating the utility of immutable connectors in program synthesis driven by heap-manipulating separation logic specifications under Prof. Ilya Sergey at Yale-NUS.

✧ The hypothesis is that immutable connectors will make for more productive proof search and improve the intuitiveness of synthesized programs.

Work Experience

Fusemail – Software Engineering Co-Op *09/2017 – 04/2018*

✧ Collaborated with team members for timely completion of projects. Resolved tickets by systematically writing clean, organized, maintainable Java code, and fixed production bugs by deeply investigating systems.

✧ Developed, documented, and tested solutions within existing systems.

✧ Ensured code standards and iterated over code by participating in code reviews.

✧ Worked with microservices, REST APIs, MariaDB and SQL, build pipelines.

UBC Extended Learning – Undergraduate Academic Assistant 05/2017 - present

✧ Developed code examples in TypeScript, Java, and BSL; Creates assignments and other content to be used in a 6-part software engineering MOOC.
✧ Contributes to learner understanding by actively answering forum questions.
✧ Provides meaningful feedback on code correctness and quality for assignment submissions in TypeScript, Java, BSL for hundreds of students.

UBC Computer Science – Teaching Assistant 09/2016 – 04/2017

✧ Interacted with students, other TAs, and professors to deliver a comprehensive learning experience for an introductory computer course.
✧ Lead 3-hour labs guiding students to understand problem solutions on their own.
✧ Graded exams in an intensive course of about 600 students.

Volunteer Experience

UBC Computer Science Student Society - President 05/2019 - present

✧ Oversees student society for over 2000 Computer Science undergraduate students.

✧ Orchestrates and enables peer-to-peer services in academic support, enriched social circles, and industry growth.

✧ Empowers students to create initiatives that matter to them through club resources.

UBC Computer Science Student Society - VP External 05/2018 - present

✧ Organized 52 companies and 2000+ students for the UBC Technical Career Fair.

✧ Coordinated between multiple parties to secure venue, furnishings, catering, smooth day-of-operations, and fulfilling experiences for employers and students.

✧ Overall feedback was very positive; event was well-organized and enjoyable.

Education and Awards

University of British Columbia, Computer Science *09/2015 – present*

- ☆ IKB Women in Technology Scholarship (2018)
- ☆ NSERC USRA (2018)
- ☆ Science Scholar (2016)
- ☆ Trek Excellence Award for Continuing Students (2016)
- ☆ J Fred Muir Memorial Scholarship in Science (2016)

Interests

✧ Fluent in English, conversational Chinese and French, very basic German.
✧ Mechanical keyboards, reading, writing, baking, sewing, knitting, piano, cello, painting, sketching.