

SAMANTHA YU

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Technical Work Experience

Google | Engineering Practicum Intern: **C++**

MAY 2017 - AUGUST 2017

- Investigating the worst cases of liquid sharding in Cloud Dataflow, a Big Data processing system
- Simulating how various algorithms would alleviate problems caused by data imbalance
- Designing and implementing algorithms that address the hidden clusters of data into production

Technical Projects

[erdos](#): Comprehensive Math Chat Application

NOV 2016 - DEC 2016

- Rendered messages with mathematical equations and symbols using the KaTeX JavaScript library
- Enabled users to query messages to solve and graph equations with the WolframAlpha API
- Debugged several unexpected problems like duplicate chatrooms and unsorted messages

Automated Window Cleaner: **Java**

SEPT 2015 - DEC 2015

- Designed an automated window cleaner with a dolly, suction cups, and water and chemical tanks
- Investigated alternative methods for attaching the window cleaner, such as gecko tape
- Developed a graphical simulation of the window cleaner washing a skyscraper in Java

Paint Program: **Java**

AUG 2014 - JAN 2015

- Implemented the concept of double buffering by creating an array of transparent images in Java
- Extended the program's expected capabilities so that it can add, delete, and modify layers
- Improved the suggested paint tools by using the Graphics2D library to create smoother strokes

Extracurricular Activities

Women in Computing Science

SEPT 2015 - PRESENT

- Adjudicated travel grants for the Grace Hopper conference worth a cumulative total of \$14,000
- Trained mentors for the new mentorship program as the mentor coordinator
- Launched a technical interview study group, CodeMavens, to practise whiteboarding

Achievements

Microsoft

- #DevMov Competition Top Prize: Surface Pro 4

JUNE 2016

BC Ministry of Education

- Dogwood District/ Authority Award for Computer Programming

APRIL 2015

Education

Simon Fraser University

SEPT 2015 - APRIL 2019

- Bachelor of Science: Computing Science Major - Top 15% of CS Majors at SFU
- **Relevant Courses:** Model-Based Computer Vision (CMPT 414); Operating Systems I (CMPT 300)

Technical Skills

- **Languages:** C, C++, HTML/CSS, Java, JavaScript, \LaTeX , MATLAB, x86-64 Assembly