

Anton Chen

antonchen.ca ▪ github.com/chenanton ▪ linkedin.com/in/chenanton

Email: contact@antonchen.ca

Phone: 1-403-909-5938

EDUCATION

The University of British Columbia ▪ *Bachelor of Science
Honours Computer Science and Statistics, with Co-op*

Vancouver, BC

Sep. 2019 — Present

- Cumulative average of 92% (4.0 GPA), latest yearly average of 96%; on Science Scholar and Dean's Honour Lists.
- **Coursework:** data structures, algorithms, OOP, software engineering, multi-threading, software architecture, applied statistics, honours linear algebra, and honours multivariable calculus (all courses received A+).

International Baccalaureate ▪ *Diploma Course Program
Mathematics HL (7/7) and Physics SL (7/7).*

Calgary, AB

Sep. 2017 — May 2019

WORK EXPERIENCE

VIPRE Security Group ▪ *Email Security Cloud, Back-End Development Team
Software Engineer Intern, in Test*

Burnaby, BC

Jan. 2021 — Present

- Led design and development of test automation framework in Python, fully automating back-end regression and integration testing on core mail-processing services; saved over 40 staff hours monthly from manual verification.
 - Implemented REST API endpoint testing libraries on spam and virus detecting Docker microservices.
 - Refactored existing verification methods to utilize concurrency, reducing test suite runtimes by over 65%.
- Designed and automated end-to-end unit tests with Python's Robot Framework on highly distributed AWS cloud services and MySQL databases, processing over 1.2 billion emails monthly from 50 000 business customers.
 - Wrote SQL queries to manage paid customer package configurations and cached virus sample hashes.
 - Developed Bash scripts to perform automated deployment testing across more than 140 mail servers globally.
- Trained and mentored full-time software engineer hire with system architecture, scripting, and reading code bases.

TECHNICAL PROJECTS

Vaccelerator ▪ *HackUCI 2021 Hackathon Group Project; Placed 2nd out of 89*

Jan. 2021

- Member in team of five; built a web-app offering data-driven COVID-19 vaccine rollout insights and information.
- Created interactive US heatmap visualizing pandemic vulnerability by scraping 334 days of CDC data.
- **Technologies Used:** *Python, Plotly, Pandas, HTML.*

Rubik's Cube Solver Neural Network ▪ *Solo Project*

Aug. 2020

- Implemented a feedforward deep neural network, solving any scrambled Rubik's cube with over 70% success rate.
- Developed a data generation algorithm to produce 8 million scramble patterns and corresponding solutions.
- **Technologies Used:** *Python, TensorFlow, Keras, NumPy, Matplotlib.*

Two-Dimensional Physics Engine ▪ *Solo Academic Term Project*

Jan. 2020 — Apr. 2020

- Engineered a GUI application using OOP principles and MVC patterns, simulating inelastic object collisions.
- Incorporated data persistence with CRUD data-parsing algorithms, allowing users to manage environment states.
- **Technologies Used:** *Java, JUnit, Java Swing.*

EXTRACURRICULAR EXPERIENCE

Competitive Robotics ▪ *VEX Robotics Club*

Sep. 2018 — Feb. 2019

- Group member in year-long five member project to design, build, and code a VEX robot.
- Roles include robot design, construction, and programming autonomous action in ROBOTC, a C-like language.

Volunteering and Community Service ▪ *Volunteering Club*

Sep. 2016 — Jun. 2019

- Over 50 hours of volunteer experience; includes tournament hosting, food donation preparation, and bottle drives.
- Taught grade school kids coding fundamentals with Scratch and code.org at the *Coding Buddies* organization.

TECHNICAL SKILLS

Languages: C/C++, Python, Java, SQL (MySQL), R, x86 Assembly, Bash, HTML/CSS, Scheme, L^AT_EX.

Frameworks and Libraries: TensorFlow, Robot, JUnit, Swing, NumPy/Pandas, Matplotlib.

Developer Tools: Git, Unix/Linux, Docker/Docker Compose, Jira, Bitbucket, Confluence.

Methodologies: Agile, Scrum, Kanban.