Anton Chen

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

Email: contact@antonchen.ca
Phone: Provided upon request

Education

The University of British Columbia ▪ *Bachelor of Science* **Vancouver, BC**

Combined Honours in Computer Science and Statistics *Sep. 2019 – Present*

- Trek Excellence Scholarship recipient, awarded to the top 5% of undergraduates; cumulative average of 91.3% (4.0 GPA).
- *Scholarships:* Stanley M Grant, Ron Riddell and Roy Douglas Memorial Scholarships in Mathematics; J Fred Muir Memorial Scholarship in Science; all on recommendation of the Faculty of Science or Department of Mathematics.
- *Coursework:* computational optimization, numerical algorithms, probability, real analysis, linear algebra, multivariable calculus, statistics, data structures, algorithms, OOP, software engineering, multi-threading, and software architecture.

Work Experience

Amazon.com, Inc. **Vancouver, BC**

Incoming Software Development Engineer Intern *May 2022 – Jul. 2022*

- Scheduled to complete a 12 week internship at Amazon as a Software Development Engineer, with team pending.

VIPRE Security Group ▪ *Email Security Cloud* **Burnaby, BC**

Software Engineer Intern, in Test *Jan. 2021 – Aug. 2021*

- Led design and development of test automation framework in Python for backend email-processing cloud services.
- Implemented REST API endpoint testing libraries against core 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 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 metadata.
- Trained and mentored full-time software engineer hire with system architecture, scripting, and reading code bases.

Technical Projects

Safe Walk Route Planner ▪ *Pinnacle 2021 Hackathon Project* *Sep. 2021*

- Invite-only hackathon for the winning teams of the top 50 North American collegiate hackathons, hosted in Dallas, TX.
- Member in team of five; built a web-app offering crime-data-driven route planning to increase student safety on campus.
- Implemented a custom pathfinding algorithm in JavaScript using the Google Maps Directions API, finding the safest route between two locations by leveraging FBI crime statistics from a Cloud Firestore NoSQL database.

Rubik's Cube Solver Neural Network ▪ *Solo Project* *Aug. 2020*

- Designed and implemented a deep neural network with TensorFlow, solving any Rubik's cube with over 70% success rate.
- Developed a data generation algorithm in Python, producing 8 million scramble patterns and corresponding solutions.

Two-Dimensional Physics Engine ▪ *Solo Academic Term Project* *Jan. 2020 – Apr. 2020*

- Engineered a GUI application in Java to simulate inelastic object collisions, using OOP principles and the MVC pattern.
- Incorporated data persistence with CRUD data-parsing algorithms, allowing users to manage multiple environment states.

Extracurricular Experience

Competitive Robotics ▪ *VEX Robotics Club* *Sep. 2018 – Feb. 2019*

- Member in team of five; designed and programmed autonomous VEX robot from scratch in ROBOTC, a C-like language.

Volunteering and Community Service ▪ *Volunteering Club* *Sep. 2016 – Jun. 2019*

- Over 50 hours of varied volunteer experience, e.g. taught grade school kids coding fundamentals with Scratch and code.org.

Technical Skills

Languages: C/C++, Python, Java, SQL, JavaScript/TypeScript, R, Bash, HTML/CSS, LaTeX.
Frameworks and Libraries: TensorFlow, Robot, JUnit, Swing, NumPy/Pandas, Matplotlib.
Developer Tools: Git, Unix/Linux, Docker/Docker Compose, Atlassian Product Suite.
Methodologies: Agile, Scrum, Kanban.