Anton Chen

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**EDUCATION** 

# The University of British Columbia - Bachelor of Science

Vancouver, BC

### Honours Computer Science and Statistics

Sep. 2019 — Present

- Trek Excellence Scholarship recipient, awarded to the top 5% of undergraduates; cumulative average of 92% (4.0 GPA).
- 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 • Mathematics HL (7/7) and Physics SL (7/7)

Sep. 2017 — May 2019

WORK EXPERIENCE

#### Amazon.com, Inc.

Vancouver, BC

### Incoming Software Development Engineer Intern

Jun. 2022 — Sep. 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 for 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 hashes.
- 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 top 50 winning teams of 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; taught grade school kids coding fundamentals with Scratch and code.org.

#### Technical Skills

Languages: C/C++, Python, Java, SQL, R, Bash, JavaScript/TypeScript, 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.

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