

# Matthew Chow

Software Engineer | Computer Engineering @ UBC

## Contact

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## Education

**University of British Columbia**  
BASC Computer Engineering  
Sep 2018 - May 2023  
GPA: 3.61/4.00  
Deans Honour List

## Skills

### Languages

Python, JavaScript, Go, Java,  
HTML/CSS

### Tools

AWS, Express, MongoDB, React,  
Git, Ansible

## Courses

### Coursera (See Certificates)

Deep Learning Specialization  
(5/5 Courses)  
TensorFlow Developer Certificate  
(1/4 Courses)

### University

Machine Learning & Data Mining  
Software Engineering  
Data Structures and Algorithms  
Mathematical Proof

## Extracurriculars

Inter-varsity Christian Fellowship  
(Service Team Lead)  
Wushu (Chinese Martial Art -  
Competed in Nationals)

## Experience

### Incoming Undergraduate Research Assistant | UBC

Sep 2021

- Will be researching topics of software reliability under the supervision of Dr. Rubin

### Software Engineer Intern | League

May 2021 - Present

- Streamlined content publishing workflows for internal teams by 50% for the PC Health app (100k+ downloads)
- Developed a script in Go to auto generate code from API specifications; simplified microservice creation workflows
- Transferred MongoDB collections to new schemas with migration scripts in Go
- Defined and presented deployment strategy to maintain backwards compatibility for updated database logic

### Software Developer Intern | SAP

Sep 2020 - Apr 2021

- Refactored a deployment pipeline in Jenkins and Python that serves 1,000,000+ users in AWS, Alicloud, and Azure; decreased runtime by >25%
- Maintained a Java microservice by migrating functionality from deprecated dependencies and creating load tests in Python
- Automated Linux virtual machine configuration with Ansible
- Produced design documentation and UML diagrams; justified design with respect to user, security and time requirements

### Software & QA Engineer Intern | Perk Labs

Jul 2020 - Aug 2020

- Developed and adapted wireframe components into UX features in React Native
- Strengthened UI/UX design by identifying pain points in transaction flows and proposing readability improvements
- Served an optimal experience for 5000+ users with regression and integration tests

## Projects

### Pilldex | 4th Place in 2020 Software Engineering Year

- Constructed the backend for a pill tracker that dynamically schedules reminders based on user behaviour
- Established a RESTful API with Express on an EC2 instance; verified correctness by creating a test suite with Jest, achieving 100% line and branch coverage

### ImageStash

- Developed a full stack image repository application with React and Express to handle storage of user images; operated on an EC2 instance
- Managed user information and images in S3 and a MongoDB Atlas cluster

### Foex | nwHacks2020 (Wolfram Award Top 35/145)

- Mitigated food waste by calculating and logging expiry dates for users from images with a Java Android app
- Extracted colour and object information from images to classify and determine an expiry date with the Microsoft Azure Computer Vision API