

# Arman Moztarzadeh

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## EDUCATION

### University of British Columbia

*Bachelor of Science in Mathematics*

Sept. 2020 – April 2026 (Expected)

*Vancouver, Canada*

## SKILLS & LANGUAGES

**Languages:** Python, JavaScript, TypeScript, Java, SQL, NoSQL, R

**Frameworks/Libraries:** React, Node, pandas, NumPy, Express, scikit-learn, JUnit

**Technologies:** Git, AWS, Docker, Azure, GCP, MongoDB

## PROFESSIONAL EXPERIENCE

### Software Engineer Intern

*Amazon*

June 2024 – Sept 2024

*Vancouver, British Columbia*

- Developed a full-stack workflow for credit card multi-factor authentication (MFA) for UK retail checkout using **React**, enhancing payment security for over **millions** of customers.
- Implemented a 'checkout' use case in TypeScript for the team's testing sandbox, utilizing **AWS SAM** and **AWS Lambda** to test the workflow with various inputs.
- Introduced two APIs to handle payment authorization, enabling seamless experimentation with minimal disruption to the existing codebase.

### Software Engineer Intern

*Government of Canada*

Jan 2024 – April 2024

*Ottawa, Ontario*

- Led the development of **7** features using Python and MongoDB, improving application functionality and supporting a major infrastructure upgrade.
- Utilized MongoDB to query through the production database, contributing to the deprecation of **9** legacy codebase elements and modernizing the system for improved maintainability.
- Created detailed Confluence documentation related to development, facilitating future employee onboarding.

### Undergraduate Teaching Assistant

*UBC Department of Computer Science*

Sept 2023 – April 2024

*Vancouver, British Columbia*

- Developed a course assignment to compare the performance of **AWS EMR** single-node and multi-node clusters for big data processing tasks, providing insights into cluster optimization strategies.
- Provided feedback in editing and reviewing course assignments related to AWS, Azure, and Docker.
- Assisted **100+** computer science and data science students to help them understand cloud concepts.

### Software Engineer in Test Co-op

*Optum*

May 2023 – Dec. 2023

*Richmond, British Columbia*

- Collaborated closely with the testing team to develop and execute advanced automated test scripts using **C#** and **Selenium**, leading to a **10%** performance enhancement as measured by LoadRunner benchmarks.
- Leveraged VMware and Google Cloud platforms to architect and manage virtual testing environments.
- Developed **8** Python scripts utilizing pandas and numpy to automate critical tasks including extracting archive log data and generating CSV reports.

### Software Engineering Intern

*Porton Health*

Sept. 2022 – Dec. 2022

*Vancouver, British Columbia*

- Enhanced existing applications by introducing new functionalities and features using JavaScript, and Node.js.
- Tested and debugged over **35** components using **MongoDB** and documented workflow.

## TECHNICAL PROJECTS

### Portfolio Diversification Model [🔗](#) | *Python, Angular, Tensorflow*

Oct 2023 – Dec 2023

- Employed the Upper Confidence Bound (UCB) algorithm using **Python** to evaluate stock performance and generate investment recommendations tailored to user-defined risk tolerance and historical performance.
- Helped with the development of the **Keras Long Short-Term Memory (LSTM)** model for time series forecasting, a critical feature to enhance the project's predictive capabilities.

### BC Cancer Ticket Management System [🔗](#) | *React.js, Express.js, MYSQL*

Oct 2022 – April 2023

- Developed a laboratory management system as part of UBC Launch Pad and actively met with organizational stakeholders.
- Developed routes and models to load questions into SQL database.