Vicki Zhang

B.Sc. Computer Science + Statistics | Anticipated Graduation by May 2025 @ UBC vickiszhang@gmail.com | linkedin.com/in/vickiszhang | github.com/vickiszhang | https://vickizhang.tech

EXPERIENCE

Full Stack Developer

May 2023 – April 2024

Public Health Agency of Canada

Remote

- Led the development of Python Selenium web scraping pipelines on Google Cloud Platform, automating data collection processes for three sub-teams.
- Developed an API wrapper to streamline large file submissions through Liquidfiles from external users, created a schema validation Azure Data Factory pipeline to report status of submissions to stakeholders.
- Revamped the user interface of a Django data collection application, improving user experience by implementing error display warnings for form entries.

AI/ML Software Engineer

Sep. 2022 – April 2023

Convergence Concepts Inc.

Vancouver, BC

- Deployed production features on a financial rule check application using Python, including an AWS S3 bulk zip file compressor, and MongoDB schema modification.
- Recognized weak code areas when creating a complete data flow of the fin-tech application, refactored 1000+ lines of code and standardized the use of efficient package and OOP class structure. I created unit tests for existing features to achieve 90% passing rates, and improved runtime by 30% by removing redundancy and reducing database calls.
- Independently executed a MongoDB to SQL (Postgres) data migration project seamlessly handled the transfer of millions of lines of data over 20+ collections.
- Prototyped an API to extract driver's license information using AWS Rekognition.

PROJECTS & HACKATHONS

Digital Paint C++, OpenCV, Python

• Built a color detection and drawing tool with OpenCV: Detected specific colors via webcam and draw on screen based on detected color positions.

Tetris | C#, Visual Studio

• Developed a classic Tetris game using C# and WPF framework, including block movement, rotation, collision detection, and user-friendly UI with score panel showing current score, level, and next block preview.

Wishlist | Java, JFrame, JUnit

• App to keep track of recent purchases and wishlist items, with total balance display and load/save functionality.

Election Guard | MERN, JavaScript, HTML, CSS

1st Place Education Equity - cmd-f 2024

• Integrated Cohere API with prompt-engineering to analyze news bias, truthfulness, and political standpoint.

Oniva | MERN, JavaScript, Tailwind CSS

YouCode 2024

A personalized outdoor activity recommender in collaboration with Arc'teryx, I managed entire back-end server
operations, including API call management to MongoDB, to provide customized activity suggestions.

Volunteer

Software Developer

Oct. 2023 – Present

UBC Computer Science Student Society

- Collaborating with a team of students to create a full stack web application for UBC Volleyball Club.
- Implemented front-end design for home page, user login/sign-up, and payment processing using Stripe for payments.

Developer Executive

Oct. 2023 - Present

UBC Esports Association

Maintaining club website, developed admin login feature to a real-time system to keep track of club PC room usage.

TECHNICAL SKILLS

Languages: Java, C#, Python, C/C++, SQL (Postgres), JavaScript/TypeScript, HTML/CSS, R

Frameworks: React.js, Next.js, Node.js, Express.js, Flask, JUnit, WordPress, Spring

Developer Tools: Git, Docker, MongoDB, AWS, Azure, Google Cloud Platform, VS Code, Visual Studio, IntelliJ, Unity

EDUCATION

University of British Columbia

Vancouver, BC

Bachelor of Science in Computer Science + Statistics (3.7 GPA)

Sep. 2020 - May 2025 (Anticipated)