

SUMMARY

Software Engineer with a proven track record of enhancing application performance, optimizing data processing, and developing scalable, efficient systems. Experienced in building robust solutions across the software development lifecycle and integrating artificial intelligence into practical applications. Passionate about leveraging innovative technologies to drive impactful software development projects.

EDUCATION

University of Victoria

B.S.Eng, Software Engineering, Artificial Intelligence and Data Mining

Sept. 2019 - Dec. 2024

EXPERIENCE

Full Stack Developer, Co-op

Victoria, B.C.

University of Victoria, Advanced Research Computing Software Development Team

Jan. 2024 - Aug. 2024

- Increased performance for a Django application by 62% with Redis using cache-aside and write-back strategies.
- Optimized database throughput using Celery for asynchronous task management, reducing queries by 59%.
- Developed a robust UI testing framework utilizing Selenium Grid and Docker, enabling seamless data persistence and CI/CD integration; increased testing efficiency by 30% through parallel execution of test cases.
- Reduced API usage by 95% for a geographical data service by improving how GeoJSON coverage is handled.
- Developed a scalable policy validation system for OpenStack clouds with the Python SDK; the initiative improved cross-site policy consistency, positively impacting compliance audits for 7 key business divisions within the organization.
- Developed a Django package that enabled the ingestion of Excel sheets into databases, resulting in a 40% reduction in data processing time and streamlined workflows for data management teams

Quality Assurance Analyst, Co-op

Victoria, B.C.

ACD Systems

May 2021 - Dec. 2021

- Documented over 500 issues in Jira, overseeing defect management and report generation.
- Achieved 90% test coverage by thoroughly analyzing software functionality, performance, requirements, user stories, and use cases.
- Conducted over 100 tests across various testing types (functional, regression, integration, end-to-end) to ensure alignment with business and technical standards.
- Trained and onboarded a new employee, reducing their ramp-up time by 30% while maintaining high productivity across the team.
- Improved product efficiency by 15% and reduced response times by collaborating with engineering teams, reviewing user feedback, analyzing competitor software, and setting performance benchmarks.

PROJECTS

[Marketscrape](#) | *Django, Bootstrap, Python, JavaScript, Keras, Docker*

- Processed marketplace listings through a Django-based UI, searching up to 300 product listings on eBay using BeautifulSoup for data extraction.
- Created a GRU-based RNN for price prediction and achieved 76.84% accuracy in brand name inference using an SVM with TF-IDF vectorization.
- Analyzed scraped data from eBay with Pandas and Numpy to create 2 interactive visualizations—price trends and country of origin—using Plotly.

TECHNICAL SKILLS

- **Programming:** Python, C, C++, Go, Java, JavaScript/TypeScript, SQL, HTML/CSS
- **Tools and Platforms:** Docker, Kubernetes, AWS, Azure, Redis, Jenkins, PostgreSQL, MongoDB
- **Testing:** Selenium, Playwright, Jest, JUnit, Pytest, SonarQube
- **Frameworks:** Django, React/Next.js, Svelte/SvelteKit, Node.js, Prisma, Drizzle ORM