Michael Bazett

Available for a 4 to 12-month co-op term
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Education

Simon Fraser University Expected Graduation: May 2029
Bachelor of Science - Software Systems, Applied mathematics minor *Burnaby, BC, Canada*

- Dean's Honour Roll – GPA **3.8/4.0**

Experience

Reinforcement Learning Infrastructure Developer June 2026 - Present
SFU Robot Soccer

- Configured and deployed reinforcement learning training environments using Docker, Python, and PyTorch.
- Designed and executed experiments evaluating model training performance across multiple environments and algorithm configurations.

Technical Projects

Neighborhood News — Local News Dashboard | Live Demo | GitHub January 2026
Python · PostgreSQL · PostGIS · FastAPI · GitHub Actions · Typescript

- Built an automated Python ETL pipeline with GitHub Actions to ingest, normalize, and upsert Vancouver Open Data records daily, preventing duplicate entries across **1,000+ civic events**.
- Designed a PostgreSQL + PostGIS backend schema for geospatial event data, using spatial indexing and geometry queries to map civic events to neighborhood boundaries without application-layer computation.
- Developed FastAPI endpoints with multi-parameter filtering across date range, event type, and neighborhood, optimizing query performance with temporal and geospatial indexes.

TestStream — Test Case Management System | GitHub March 2026
Java · Spring Boot · PostgreSQL · Thymeleaf

- Built backend features for a web based test case management system supporting test case editing, tagging, filtering, bulk updates, and Excel-based QA workflows.
- Improved maintainability through iterative refactoring, GitHub pull requests, issue tracking, and collaboration with teammates across backend, database, and interface layers.
- Refactored a critical system bottleneck by decomposing a God class into clean abstractions, cutting code redundancy by **10%** and establishing clear component boundaries for future feature scaling.

JourneyHacks — Live Game Model Detection | GitHub September 2025
Python · YOLOv8 · OpenCV · PyTorch · Computer Vision

- Engineered a real-time computer vision pipeline using YOLOv8, OpenCV, PyTorch, and MSS to detect in-game objects with $<$ **50ms latency** and **0.85 mAP50**.
- Integrated object detection outputs with a Python state machine to track game state over time, connecting perception results to downstream decision logic.
- Developed a heuristic state-prediction model under partial observability, achieving **92% precision** by combining sequence history, resource constraints, and deck-cycle proximity.

Other Experience

Head Line Cook / Server June 2020 – Present
The Keg *Surrey, BC, Canada*

- Operate in high-output, time-constrained environment handling up to **450+ covers in 4 hours**, maintaining product quality under strict timing constraints.

Technical Skills

Languages: C++, Java, Python, SQL (PostgreSQL), HTML/CSS, Typescript
Frameworks & Tools: Linux, Git, CI/CD, FastAPI, Docker, GitHub Actions, React, Vue **Libraries**: PyTorch, YOLO, OpenCV, pandas, NumPy, Matplotlib, Springboot