

Amelia Kemp

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TECHNICAL SKILLS

Languages: C/C++, Python, JavaScript/TypeScript, Java, HTML, CSS, SQL, Assembly
Frameworks/Libraries: React.js, Node.js, GraphQL, Git, Bash, Linux, Milvus, iPerf3, Flent, TailwindCSS
Developer Tools: AWS, Azure, Postman, MongoDB, MySQL, Git, Docker, VS Code, IntelliJ, Studio 3T, Maven, PostgreSQL

EXPERIENCE

- Java Backend Developer** September 2025 - December 2025
Vivid Seats LLC *Toronto, ON*
- Queried and validated **MongoDB** test data using **Studio 3T**, **Postman**, and **GraphQL**, and integrated checks into **Maven**-based test pipelines
 - Removed hard dependencies between test cases by introducing isolated test data setup/teardown, eliminating recurring flaky failures caused by shared state
 - Built and maintained end-to-end **Java** tests using **JUnit** and OOP patterns to validate **GraphQL**-backed features across API, data, and business-logic layers
- Cloud Solutions Developer** January 2025 - April 2025
March Networks *Ottawa, ON*
- Deployed **AWS** backend for hosted AI models via **boto3** in **Python** and **Flask**; integrated **Milvus** vector database
 - Added **AWS Bedrock Guardrails** to the AI Search product via **boto3** in **Python** to moderate user queries
 - Improved search results by architecting a false-positive filtering feature using **Amazon Nova** via **boto3** in **Python**
 - Built an image retrieval benchmark to evaluate multimodal embedding models (e.g., CLIP, Jina CLIP, Titan)
- Networking Research Associate** June 2024 - August 2024
Algonquin College Applied Research *Ottawa, ON*
- Researched techniques for achieving low latency, low loss, and scalable throughput of packets in networks
 - Recompiled the **Linux** kernel to test different congestion control algorithms using **iPerf3**
 - MBuilt a testing network with PCs, routers, and switches for **optimizing WiFi 7 performance**
- AI Solutions Developer** June 2024 - Aug 2024
Southwestern University *Ottawa, ON*
- Designed an investment bot leveraging Azure AI Services (Bot Services, ML) to personalize advice
 - Created a pipeline for data collection, model training, API integration, and deployment using Azure Cloud
 - Earned Microsoft Azure (AZ-900) and AI Fundamentals (AI-900) Certifications and presented the solutions

PROJECTS

- Reci - Recipe Sharing Web App** | *TypeScript, SQL, Express, React, Tailwind CSS, Docker, PostgreSQL*
- Built backend with TypeScript, Express, SQL, and PostgreSQL, adding follower endpoints and automated recipe-saving via SQL triggers
 - Optimized database performance with indexes and wrote TypeScript object types
 - Connected backend to React modals with Tailwind CSS and managed environments using Docker
- Product Joy Predictor - Chrome Extension** | *JavaScript*
- Used the Laplacian Succession Theorem to calculate the probability of a user enjoying a product
 - Built and deployed a Chrome extension for Amazon.ca and Amazon.com using JavaScript with 8 active users
- Personal Website** | *HTML, CSS, JavaScript, Git*
- Designed and developed a personal website with HTML, CSS, and JavaScript to showcase software projects
 - Employed version control with Git and GitHub, published the website using a custom domain

EDUCATION

- University of Waterloo**, *Bachelor of Software Engineering* *Expected May 2028*
- Relevant Courses: Databases (**SQL**), Operating Systems (**C++**), Compilers (**C**), Digital Computers (**Assembly**), Algorithms, Object Oriented Programming (**C++**), User Interfaces (**JavaScript/Typescript**)