

Isaac Abell

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EDUCATION

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| University of Toronto <i>B.Sc. Computer Science, Statistics</i> | Sep. 2022 – May 2026 CGPA: 3.53 |
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TECHNICAL SKILLS

- Languages:** Python, JavaScript, TypeScript, Java, SQL (PostgreSQL)
Frameworks: React, Node.js, FastAPI, Spring Boot
Libraries: Pandas, NumPy, Matplotlib, Scikit-learn, PyTorch, Transformers, OpenCV
Developer Tools: AWS(EC2, Lambda, S3, RDS, Amplify), GCP(Vertex AI), Firebase, Git, Docker, GitHub Actions

EXPERIENCE

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| iXp Intern - Full Stack Developer <i>SAP</i> | May 2024 – Present Toronto, ON, Canada |
| <ul style="list-style-type: none">Developed a Vision Transformer (ViT) model using transfer learning to classify real-time user engagement, achieving 90% accuracy with planned global deployment across 18 SAP Experience Centers in 2026.Built data extraction, cleaning, and labeling pipelines to prepare datasets for computer vision model training, ensuring high-quality inputs for real-time user engagement classification.Collaborated with a team of 5 interns to build SAP Demo Environment 2.0, a platform used by 20,000+ SAP Employees and Partners to showcase SAP solution demos; developing the front end with TypeScript/React and a Node.js REST API layer to organize and serve backend data.Successfully balanced full-time work with a full-time course load at the University of Toronto. | |
| Research Assistant (part-time, for course credit) <i>University of Toronto Intelligent Adaptive Interventions Lab</i> | Sep. 2024 – May 2025 Toronto, ON, Canada |
| <ul style="list-style-type: none">Developed a full-stack web app with end-to-end deployment to test the lab's AI teaching assistant, building a FastAPI backend and React frontend.Deployed the backend on AWS EC2/S3 and the frontend via AWS Amplify.Reworked the underlying GPT-based model to make queries concurrently, improving processing speed by 80%. | |
| Software Engineering Intern <i>Appex</i> | May 2023 – August 2023 Boston, MA, USA |
| <ul style="list-style-type: none">Developed and deployed an AI-powered app review summarization tool utilizing the OpenAI API and prompt engineering. Implemented AWS services (CloudWatch/Lambda for scheduling, SES for notifications) to deliver actionable insights, enabling Development and Product teams to rapidly identify and resolve user complaints, contributing to a 20% productivity increase.Reduced AWS costs by \$2,500/month by replacing a macOS EC2 instance used for APNs token signing with a Linux-based implementation using portable credentials. | |
| Software Engineering Intern <i>Guavy</i> | May 2021 – August 2021 Victoria, BC, Canada |
| <ul style="list-style-type: none">Developed Puppeteer scripts to scrape websites, enhancing the volume and quality of data in Guavy's databases.Created Cypress tests to validate website functionality prior to deployment, ensuring a reliable user experience. | |

PROJECTS

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| Rental Listings Website with Commute Filter GitHub Repo Live Site | |
| <ul style="list-style-type: none">Engineered a full-stack rental search platform with a React frontend and serverless backend, enabling users to search and filter listings by commute time.Built a hybrid Python data pipeline to scrape real estate listings locally, store them in AWS S3, and automate updates via a serverless backend (AWS Lambda + RDS) exposing a REST API for real-time filtering.Technologies: Python, SQL, JavaScript, React, Docker, GitHub Actions, AWS | |
| Artificial Isaac: Personalized AI Chatbot GitHub Repo | |
| <ul style="list-style-type: none">Fine-tuned Qwen 2.5 (7B) on personal WhatsApp and Instagram chats to create a chatbot that mimics my communication style.Integrated Retrieval-Augmented Generation using ChromaDB for accurate personal knowledge retrieval.Technologies Used: Python, PyTorch, Transformers, ChromaDB, BitsAndBytes, LoRA | |