Isaac Abell

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EDUCATION

University of Toronto

Sep. 2022 – May 2026

B.Sc. Computer Science, Statistics

CGPA: 3.53

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Java, SQL (PostgreSQL)

Frameworks: React, Node.js, FastAPI, Spring Boot

Libraries: pandas, NumPy, Matplotlib, scikit-learn, PyTorch, OpenCV

Developer Tools: AWS(EC2, Lambda, S3, RDS, Amplify), GCP(Vertex AI, GCS), Git, Docker, GitHub Actions

Experience

iXp Intern - Full Stack Developer

May 2024 - Present

Toronto, ON, Canada

SAP

- Developed a computer vision model leveraging transfer learning on a Vision Transformer (ViT) to classify real-time user engagement, with planned global deployment across 18 SAP Experience Centers in 2026.
- Collaborated with a team of 5 interns to build SAP Demo Environment 2.0, a platform currently used by 20,000+ users to showcase SAP solution demos; developing the front end with TypeScript/React and adding a Node.js REST API layer to organize backend data for integration with the front end.

Research Assistant (part-time, for course credit)

Sep. 2024 – May 2025

University of Toronto Intelligent Adaptive Interventions Lab

Toronto, ON, Canada

• Completed end-to-end development of a full-stack web app to test the lab's AI teaching assistant, with a FastAPI backend, React frontend, backend on AWS EC2/S3, and frontend deployed via AWS Amplify.

Software Engineering Intern

May 2023 – August 2023

Appex

Boston, MA, USA

- Built and deployed an app review summarization tool to generate monthly summaries for development and UX teams, enabling them to prioritize app fixes more efficiently, by using the OpenAI API, leveraging prompt engineering and automated AWS services (CloudWatch/Lambda for monthly execution, SES for email notifications).
- 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

May 2021 – August 2021

Guavy

Victoria, BC, Canada

- 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

Rental Listings Website with Commute Filter | GitHub Repo | Live Site

- Engineered a full-stack rental search platform with a React front end and serverless backend, allowing users to search and filter rental listings based on commute time to a specified destination.
- Developed a hybrid data pipeline in Python that scrapes real estate listings locally (to bypass IP address blocks) and stores them in AWS S3 for downstream processing.
- Deployed a serverless backend using AWS Lambda and a SQL database on AWS RDS, automating updates from S3 and exposing a REST API for real-time filtering.
- Technologies Used: Python, SQL, JavaScript, React, Docker, GitHub Actions, AWS

Algorithm Visualizer Website | GitHub Repo | Live Site

- Built an interactive web tool to visualize classic algorithms including DFS, BFS, Quicksort, Heapsort, and Binary Search
- Implemented step-by-step animations using React and Framer Motion, allowing users to trace array and graph operations in real time.
- Technologies Used: React, TypeScript, Framer Motion