Isaac Abell

me@isaacabell.com | linkedin.com/in/isaac-abell | github.com/Isaac-Abell

EDUCATION

University of Toronto
Toronto, Canada

B.Sc. Computer Science, Statistics, CGPA: 3.53
Sep. 2022 – May 2026

EXPERIENCE

iXp Intern - Full Stack Developer
May 2024 – Present

SAP
Toronto, ON, Canada

- Developed a real-time computer vision–based engagement tracking system using transfer learning on a pre-trained ResNet model to help designers optimize customer engagement at SAP Experience Centers, with deployment planned for 2026.
- Worked with a team of interns to build SAP Demo Environment 2.0, a platform currently used by 20,000+ internal users and partners to access and present SAP solution demos; developing the front end with TypeScript/React and adding a Node.js REST API layer to organize backend data for seamless 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

- Built and deployed a full-stack web app to test the lab's AI teaching assistant in real-world applications, developing a FastAPI backend, React frontend, and hosting backend services on AWS EC2/S3 with frontend deployment via AWS Amplify.

Software Engineering Intern
May 2023 – August 2023

Appex
Boston, MA, USA

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

Commute Rental Listings | 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

Thestudentbase

- Collaborated with a team of students to build an online marketplace for University of Toronto students.
- Developed the front-end using JavaScript/React, deployed via AWS Amplify.
- Implemented Java Spring Boot REST APIs for product listings and configured CI/CD pipelines with GitHub Actions to automate testing and deployment.
- Technologies Used: Java, SpringBoot, Javascript, React, Github Actions, AWS

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), Git, Docker, GitHub Actions