

JOEY SIY

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EDUCATION

Western University

Expected Jun 2025

Honours BSc in Computer Science — **GPA - 3.9**

London, ON

- Western Continuing Admissions Scholarship
- Dean's Honour List 2021, 2022
- Activities & Societies: Western Mahjong Club (VP Events), Western Esports & Gaming Association (VP Internal)

EXPERIENCE

CashEx

Jun 2023 – Dec 2023

Software Engineer — Part Time

Boston, MA

- Implemented the back-end for email lists by integrating with the **SendGrid API**, facilitating product feature waitlists that allow us to reach an interested userbase, test beta features, and conduct user interviews
- Led development on admin & growth dashboards in **React**, designing and implementing endpoints for the dashboard using **Python**, **SQLAlchemy**, **GCP**, and **Firebase**, for use by growth & operations teams
- Audited and redesigned back-end exception usage, hierarchy, and handling; Implemented logging, Slack alerts, and Email alerts at varying degrees of urgency and thereby **cutting error response time dramatically**

CashEx

Jun 2022 – May 2023

Software Engineer — Full Time

Boston, MA

- Identified sub-optimal logging setup in API endpoints by timing cloud function execution durations; improved back-end logging times by **90%** by optimizing how logging routines were set up through GCP
- Wrote **unit tests** for each GCP cloud function, allowing automation of testing to occur on each pull request, minimized time spent debugging and ensuring that the main branch is always in a functional state
- Independently developed user notification architecture through design patterns such as factory and strategy, **Android** & **iOS** push notification services, and **SendGrid** & **Twilio** integrations, reached **70K+ users**
- Efficiently implemented banking integrations for our back-end with multiple distinct possible partners' APIs on short notice, adding flexibility and thereby **minimized the time needed to prepare for app launch**

PROJECTS

LobbyIQ

Sep 2023 – Apr 2024

Thesis Student

London, ON

- Developed a comprehensive, stand-alone PDF export solution for complex data visualizations of existing web app by leveraging the **Puppeteer** library to convert **React** web-pages into print-ready formats
- Integrated new export service with existing frontend, backend systems; achieved seamless user flow on frontend and utilizing backend **RESTful APIs** to dynamically retrieve and handle necessary and up-to-date data
- Collaborated with a team of stakeholders, developers, and designers on a **weekly sprint model** to create and iterate over a high-quality and effective user interface to best serve the purposes of end-users

Hack the 6ix

Sep 2020 – Apr 2021

Web Developer

Toronto, ON

- Built the landing page and hacker dashboard front-ends via a **custom React component library** of Toronto's largest student-led, not-for-profit, summer hackathon which garners **1500+ applicants**
- Closely collaborated with seven UI/UX designers and five web developers to create the above pages that met the given requirements and specifications through use of a **Figma** prototype

Western AI

Apr 2020 – Sep 2020

Project Tech Lead

London, ON

- Deployed a **Flask** web app that identifies ASL images and translates to plain text through a machine learning model trained via **TensorFlow Keras** in **Python**; visualized key statistics through **Matplotlib**
- Led **sprint planning** and delegated to a team of three undergraduate students to ensure timely completion
- Overcame technical challenges by studying concepts such as **RNNs**, **computer vision**, and **CNNs** in depth
- Held weekly **SCRUM** style meetings and practiced **agile development** to maintain consistent work ethic

TECHNICAL SKILLS

Languages: Python, Java, C, C++, C#, JavaScript, SQL, R, PHP, HTML, CSS, Go, Flutter, Dart

Frameworks/Libraries: SQLAlchemy, Matplotlib, Firestore, MySQL, TensorFlow, React, MaterialUI

Developer Tools: Figma, GitHub, Jira, Terraform, PostgreSQL, Mixpanel, Amplitude, GCP

Coursework: DSA, OOP, Databases, Statistics, AI, Human-Computer Interaction, Operating Systems