

AHMED HASSINI

ahassini04@gmail.com | [Portfolio](#)

EDUCATION

HBSc, University of Toronto (GPA: 3.95, Dean's List)

Expected Graduation: May 2027

Computer Science Specialist (Machine Learning Focus), Statistics Minor, ASIP (Co-op)

- University of Toronto Scholar Award, valued at \$7,500.
- **Coursework:** Deep Learning, Natural Language Processing, Machine Learning, Software Design (REST APIs), Symbolic Logic, Operating Systems, Advanced Algorithms, Data Analysis, Databases, Web Programming.

EXPERIENCE

Scholaris | University of Toronto Libraries

Sept. 2026 – Apr. 2027

Student Library Assistant, Repository Development | *Python, Java, UNIX, Git, DSpace*

- Maintain and test **Scholaris**, a national shared repository service built on **DSpace** and used by 30 Canadian institutions, testing and triaging feature requests, upgrades, and issues in repository tooling.
- Retrieve and validate repository metadata through the **DSpace REST API**, scripting requests in **Python** to pull collection and item records.
- Contribute to the open-source **DSpace** project on **GitHub**, working in **Java** across a **UNIX**-based stack.

Ecobee

May 2025 – Aug 2026

iOS Engineer | *Swift, SwiftUI, GraphQL, Xcode, CircleCI, Jira, Figma*

- Contributed to 8+ features in Ecobee's smart home app, used across 2M+ homes, including revamping the smart camera **Activity Feed** in **Swift** and **SwiftUI** to surface **person** and **package detection** events alongside motion.
- Wrote client-side **GraphQL** queries and reviewed backend schemas on **GitHub** against iOS standards.
- Led an epic spanning 3+ sprints across both the **iOS** and **Android** teams, breaking the work into 30+ **Jira** tickets and coordinating delivery between platforms.
- Authored **XCTest** unit tests for every feature delivered and maintained **CircleCI** pipeline health, diagnosing and resolving failing builds.
- Resolved bugs and refactored legacy code, rebuilding reusable **SwiftUI** components shared across screens.

Teaching Assistant

Sept. 2024 – Apr. 2027

University of Toronto | *Calculus I, Calculus II, Linear Algebra I*

- Taught 150+ students across four terms and three courses (**MAT186** Calculus I, **MAT187** Calculus II, **MAT223** Linear Algebra I), leading weekly tutorials of roughly 40 students.
- Sustained 80%+ tutorial attendance by running office hours and giving individual feedback on problem sets, and supported fellow TAs with grading.

PROJECTS

Ihsan | *Swift, SwiftUI, WidgetKit, CoreLocation, CoreHaptics, Figma*

- Founded and lead an iOS prayer-times app at nearly 1,000 users, owning its roadmap and architecture.
- Built location-aware scheduling with **CoreLocation** supporting multiple calculation methods worldwide, plus a **CoreHaptics** Qibla compass and **WidgetKit** home- and lock-screen widgets.
- Designed a tracking dashboard with chart analytics and reminders, iterating on App Store feedback.

Movie Scene Replacer | *Python, Flask, GPT-4o, Veo 3.1, OpenCV, Next.js*

Track Winner, UmmahHacks

- Built an AI pipeline that detects and replaces inappropriate scenes in a film while preserving its plot, winning the Open Innovation track at a 101-participant hackathon with a team of 4.
- Paired **PySceneDetect** with **GPT-4o** vision to flag scenes, regenerating each through **Veo 3.1** to preserve narrative.
- Added an audio filter for explicit language and wrapped the pipeline in a **Flask** API and **Next.js** frontend.

TECHNICAL SKILLS

Languages: Java, Python, TypeScript, JavaScript, C, Swift, R, SQL, Assembly

Frameworks, Libraries & APIs: SwiftUI, GraphQL, Flask, Express, Next.js, Apple Wallet (PassKit, APNs), OpenAI GPT-4o API, Pandas, NumPy, Matplotlib, OpenCV, BeautifulSoup

Developer Tools & Platforms: Git, GitHub, UNIX/Linux (Bash), Xcode, VSCode, CircleCI, Jira, Supabase, Railway, MongoDB, DSpace