

# Kashish Mittal

[m04kashish@gmail.com](mailto:m04kashish@gmail.com) | 416-834-6597 | [github.com/04kash](https://github.com/04kash) | [linkedin.com/in/kashmitt](https://linkedin.com/in/kashmitt)

## EDUCATION

### University of Toronto, Canada

Sept 2022 – June 2027

*Honors Bachelor's of Science Computer Science with Minors in Mathematics & Economics (Co-op)*

- **GPA:** 4.0/4.0, **Dean's List Scholar Winter 2023, 2024**
- **University of Toronto International Scholar Award Recipient:** scholarship amounting to 100,000 CAD

## TECHNICAL SKILLS

**Languages:** Javascript, Typescript, Java, Python, C, SQL (Postgres, MySQL), HTML/CSS, R

**Frameworks/Tools:** React, Next.js, Node.js, Git, Figma, Keycloak, Docker, GitHub Actions, AWS S3

## WORK EXPERIENCE

### Software Engineer Intern

May 2024 – Present

*Red Hat Developer Hub (RHDH) Team @ Red Hat, Toronto, ON*

- **Maintaining** Backstage's community-plugins repo, encompassing responsibilities like **hosting** SIG meetings, **triaging** issues (including CVEs), **reviewing** PRs, and driving **workflow improvements**; consistently ranked as the **#6** overall contributor.
- **Hardened security** by adding robust permission checks to two critical catalog endpoints and conditional permission checks for the scaffolder plugin endpoints, mitigating unauthorized access and bolstering access control.
- **Drove** PoC to implement Backstage's **event-driven architecture** in RHDH, significantly reducing CPU usage, database load, and API calls to external services.
- Built rhdh-techdocs-pipeline with **GitHub Actions** & **AWS S3** to offer reusable solution to publish TechDocs for customers.
- **Established and maintained** the rhdh-plugins repository, implementing automated CI and npm publishing for 35+ plugins via **GitHub Actions** and **Changesets** to streamline releases.
- Organized **two Hack Weeks** hosting key sessions, resulting in **12+ PoCs leveraging AI** to improve team workflows.

## VOLUNTEER EXPERIENCE

### Project Lead

Sept 2024 – May 2025

*University of Toronto Blueprint, Toronto ON*

- **Directed** an **8-member team** through an **8-month project lifecycle** to successfully design and deliver a custom job board web application for Toronto Employment Community Services.
- **Defined** project scope, **authored** design documentation, **delegated** tasks, and **mentored** junior developers.
- **Deployed** core system architecture on **AWS**, leveraging **S3** to establish a secure, scalable resume storage solution.
- Facilitated **agile ceremonies** to drive timely, high-quality delivery, contributing to a **20% increase in sprint velocity**.

### Research Assistant

May 2023 – Sept 2023

*Intelligent Adaptive Interventions Lab, University of Toronto, Toronto ON*

- Developed **ABSubscribe** with researchers, an LLM tool for rapid text variation exploration, reducing workload and enhancing user perceptions in a **12-writer study**.
- **Co-authored paper** "ABSubscribe: Rapid Exploration of Writing Variations in Human-AI Co-Writing Tasks using Large Language Models," accepted at **ACM CHI 2024**.

## SELECTED TECHNICAL PROJECTS

### Eve | *NVIDIA Jetson, docker, Async sockets, Luxonis AI Camera* *Best Environmental Hack - Hack the 6ix (2024)*

- Created an **autonomous robot** to evaluate building sustainability against LEED, BREEAM, and ISO14001 standards.
- Integrated **Luxonis AI camera** to enable **real-time high-definition image transmission** via async sockets, improving data processing by deploying code on **NVIDIA Jetson**.
- Built a comprehensive report with **Next.js & Chart.js**, visualizing 4 environmental metrics for clear insights.

### Memorify | *React, Tailwind, Django, Cohere API, Midjourney*

*UofTHacks XI (2024)*

- Engineered an AI-powered journaling application leveraging **Cohere's API** and **Midjourney AI** to automatically extract contact information and generate personalized avatars with **85% accuracy**, enabling quick contact creation.
- Led UI development using **Figma, React, and Tailwind CSS** to achieve an intuitive and user-friendly interface.

### Compel-O-Meter | *Python, Flask*

*Feb 2023 – July 2023*

- Created a tool which detects propaganda and hate speech against marginalized groups with 3 other peers.
- Implemented an **AI-based sentiment lexicon** projected to improve long-term model accuracy by **15%** after 1000 inputs.
- Boosted sentiment analysis accuracy by 21%(survey result) via **NLP pipelines, and data cleansing**.