# Maaz Siddiqi

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#### EDUCATION

#### Honors BSc. Computer Science

GPA: 3.9/4.0

Western University

2021 - 2026 (Expected)

- Awards: Scholarship of Distinction (\$3,500), Dean's Honors List (2021, 2022, 2023)
- Courses: Data Structures & Algorithms, Computer Networking, Compilers, Databases, Operating Systems, Linear Algebra I

## TECHNICAL SKILLS

Tech Stack: Ruby, Java, Python, Go, Rust, C, C++, C# (Unity), JS/TS, React, SQL, Docker, Kubernetes

Tools: Firebase, AWS (Lambda, RDS, Event Trigger), LLMs and RAG models, OpenShift, Figma, Jira, Confluence, Jenkins

# Experience

#### **Amazon Web Services**

Vancouver, ON, Canada

Software Development Engineering Intern | Python, C, Typescript

Jun 2025 - Present

- Designed and implemented automated engine upgrade system for ElastiCache MemoryDB engine releases, reducing release downtime by 73% for 300+ production clusters and a reduction in release upgrade operational tickets by 23%
- Identified and fixed a race condition in Redis Core: Redis benchmark CLI and added support for granular timeouts
- Integrated graceful retries in synthetic load generation system to increase availability by 22% and enabling resistance to frequent cluster connection failures and failover

Toronto, ON, Canada

Software Engineering Intern | Ruby on Rails, React, SQL, GraphQL

Jan 2025 - Apr 2025

- Launched Mobile Ads for Partners on the Shopify App Store, generating \$200K+ revenue in 1 month with 66K clicks and 20K installs; adopted by 16% of partners and featured in 14% of all platform ads
- Implemented new validation for all app submissions, identifying 16K+ affected apps via SQL and planning staged rollout
- Invited to lead an internal Cursor + AI workflows workshop for 32 senior+ engineers and managers, sharing prompting strategies, workflows, and automation techniques across teams

Onova Toronto, ON, Canada

Software Engineering Intern | React, Django, Google Cloud Run, Docker, Terraform

Sep 2024 - Dec 2024

- Built a B2B innovation management platform for Fortune 500s including Microsoft, Google Cloud, and Cappemini • Designed new feature flagging system for 12 features to streamline feature sets in multi-tenant deployments and A/B testing
- Produced an increase in code coverage by 36% by integrating Cypress, building testing guide, and conducting 3 workshops

## Royal Bank of Canada

Toronto, ON, Canada

Software Engineering Intern, Amplify Incubator | React, FastAPI, OpenAI, RAG, Kubernetes

May 2024 - Aug 2024

- Built a patent pending solution to reduce call times by 17% for over 90,000 employees to HR, saving 600,000 mins/year
- Developed RAG model using GPT-4 Turbo and embedded enterprise documents in vector database to generate personalized questions and suggest resources, projecting \$2,200,000 in annual cost savings and 12.5% liberation of labor in HR
- Achieved a 30% reduction in downtime by migrating away from older Jenkins pipeline and implementing new CI/CD pipeline with GitHub Actions and Kubernetes on OpenShift

## PeerSupport.io

Vancouver, BC, Canada (Remote)

Software Engineering Intern | React, AWS, Firebase, Docker

Sep 2022 - Apr 2023

- Reduced recommendations algorithm runtime by 80% utilizing parallel data handling and consolidating queries
- Implemented 4 API Cron jobs using AWS Lambda functions and Event Triggers, and provisioned new RDS databases
- Streamlined development by integrating Docker, including local database instancing and seeding, and hot-reloading

## Leadership

#### Hack Western

Co-Chair

Apr 2023 - Jan 2024

- Led the planning and execution for one of the largest hackathons in Canada by managing a team of 26 organizers across Engineering, Design, Marketing, Sponsorship, and Logistics – welcoming 400+ attendees in-person for the 3-day event
- Sourced over \$50,000 in funding by negotiating sponsorship contracts and engaging with company representatives
- Coordinated promotional campaigns and websites producing 1300+ applications, and a live site facilitating 500+ users

# Western Developers' Society

Tech Lead

 $May\ 2022 - Apr\ 2023$ 

- Supervised 50 developers, offering comprehensive technical guidance, and ensuring consistent project progress
- Boosted registrations by 27% by spearheading the development team and maintenance of the club's primary website

## Projects

## 'zlang' Compiler 🖸 | C++, LLVM

- Built compiler for custom general-purpose programming language by designing LL(1) grammar and compiling to LLVM Intermediate Representation (IR), leveraging LLVM toolchain to further compile to machine code on various architectures Western Rank 🔾 | React, Typescript, Tailwind, Prisma, PostgreSQL
  - Built a course review platform for Western University, facilitating over 10,000 visitors and 470+ reviews