

Mahamed Nor

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Education

Toronto Metropolitan University

April 2027

Bachelor of Science in Computer Science (Co-op) - GPA: 3.8

Toronto, ON

- **Relevant Coursework:** Database Management, Data Structures, Systems Programming, Object-Oriented Programming

Experience

First National Financial

September 2025 – Present

Software Engineer Intern | *C#, .NET Core, SQL, Vue.js, Azure*

Toronto, ON

- Architected **15+** RESTful microservices using C#, ASP.NET Core, Entity Framework, and SQL Server 2019, serving **50K+** daily users across customer, investor, and employee platforms with **99.7%** uptime SLA.
- Established Azure DevOps CI/CD pipelines with Git, **Docker** containerization, and xUnit automated testing, reducing deployment cycles from 2 weeks to 3 days (**30%** improvement).
- Refactored **10K+** lines of legacy VB.NET to async C# and integrated **Stripe/SendGrid** REST APIs, improving transaction throughput by **25%** and data accuracy by **15%**.

MOR Initiative

September 2024 – June 2025

Software Engineer Intern | *Next.js, Node.js, PostgreSQL, Prisma ORM, Docker, AWS*

Toronto, ON

- Engineered mentorship platform with Next.js, Node.js, PostgreSQL, and Prisma ORM, supporting **300+** high school students and **150+** university mentors with intelligent matching based on major, interests, and availability.
- Integrated Google Calendar API and Zoom SDK for automated scheduling and virtual meetings, increasing bookings by **60%**. Built **AWS S3/CloudFront** resource library with **85%** download rate across **200+** monthly users.
- Deployed containerized application using Docker and AWS ECS with CI/CD pipelines (GitHub Actions) and automated testing (Jest, Cypress), reducing production bugs by **40%**.

Projects

CodeSync | *Next.js, TypeScript, Socket.io, Redis, Docker, PostgreSQL, AWS*

- Built real-time code editor with Next.js, Socket.io, and Redis pub/sub supporting **50+** concurrent users with **<100ms** latency using operational transformation algorithms for conflict-free collaborative editing.
- Integrated Monaco Editor with Docker-based sandboxed execution for 15+ languages and deployed on AWS ECS with NextAuth.js authentication, processing **1,000+** daily code runs with **99.9%** uptime.

MySQL Database Backup Automation Tool | *Go, MySQL*

- Built automated **MySQL** backup tool in Go with concurrent worker pools executing parallel table dumps via mysqldump, achieving **60%** faster processing and compressing backups into zip archives.
- Implemented configurable table exclusion, environment-based credential management with **godotenv**, and fault-tolerant error handling, processing **500MB+** databases with **zero data loss**.

FeelBetter AI | *React.js, Node.js, Express.js, OpenAI API*

- Built AI mental health chatbot with React.js and Node.js/Express.js integrating OpenAI API, serving **1,000+** users with **10,000+** weekly conversations through custom prompt engineering.
- Designed **RESTful API** with session management, rate limiting, and Server-Sent Events for streaming responses, achieving **<500ms** response times and **99.8%** uptime.

Technical Skills

Languages: Python, JavaScript, TypeScript, C#, Golang, Java, C, C++, SQL, Rust

Frameworks/Tools: React, Next.js, Node.js, Express, ASP.NET Core, Entity Framework, PostgreSQL, MongoDB, SQL Server, MySQL, Prisma, Redis, Docker, AWS (S3, EC2, ECS), Azure DevOps, GitHub Actions, Git, Cypress, xUnit, Postman

Concepts: RESTful APIs, Microservices, CI/CD, Async Programming, Database Optimization, JWT/OAuth Authentication, Caching, API Integration, Cloud Deployment, Containerization, Unit Testing, Agile, Code Refactoring, Prompt Engineering, NLP, Real-time Communication, Performance Optimization