Jaavin Mohanakumar

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Skills

Proficient React, TypeScript, Next.js, Tailwind CSS, JavaScript, Python, Java, C#, .NET, PostgreSQL, Azure, MongoDB

Familiar Rust, C, C++, Django, Google Cloud, AWS, Microsoft SQL, GraphQL, Redis, Prisma, React Native, OpenCV, MATLAB

Experience

Software Developer Intern | **IPEX Management Inc.** | **Oakville, ON**   **May 2023⸻August 2023**
- Implemented file transfer service in **C#** using **.NET** for business-critical process reducing downtime from 14% to 2%.
- Reduced missed promises on API Gateway improving accuracy of item-vendor mapping by 183 basis points on **ASP.NET**.
- Planned migration of a real-time application from **Microsoft SQL** server to **MongoDB** for key business service.

Software Development Co-Lead | **FIRST Robotics Team 1325 | Mississauga, ON**   **September 2021⸻June 2022**
- Led the design, implementation, and testing of software systems in **Java** for a 120lb competitive robot.
- Innovated in autonomous programming using **PID controllers**, **control systems**, and **computer vision**.
- In this community robotics team previously sponsored by NASA, the robot has won many competitions and was awarded the Excellence in Engineering Award at the FIRST Robotics World Championship in Houston.

Projects

MeGPT | **React, TypeScript, Next.js, Google Cloud**   *megpt.xyz*
- MeGPT enables creators, brands, artists, publishers, agencies, and businesses of all sizes to create an AI clone of themselves, in one simple link making them more interactive and discoverable online.

WIFOM? | **Python, OpenCV, Django**   *youtube.com/watch?v=dVGlT4DPtZg*
- What's In Front of Me? (WIFOM?) is an AI smart glass that uses machine learning object detection to relay the surroundings real-time to visually impaired users.

Tweet CoPilot | **React, TypeScript, Next.js, MySQL**   *github.com/UnloadingGnat/tweetcopilot*
- A social media platform that uses ChatGPT to keep your messages within the 280-character limit.

Chari3 | **React, JavaScript, Vite, CSS**   *github.com/UnloadingGnat/Chari3*
- Only solo winner of an award in a hackathon with 430 participants; building an app for the benefit of society.

Leadership

Assistant Project Manager | **McMaster Rocketry Team**   *macrocketry.ca*
- Coordinated between the software controls sub-team of 15 members and the project manager to drive successful rocket launch at Spaceport America in New Mexico.
- Orchestrated the team's timelines, coordinating tasks among a rocketry team of over 70 highly skilled members.

Project Lead | **McMaster Artificial Intelligence Society**   *mcmasterai.com*
- Led a team of 6 to build an Ethereum fraud detector using convolutional neural networks with TensorFlow to predict anomalous transactions in the Ethereum network at a large scale.

Committee Member | **McMaster Engineering 1 Operating Committee**   *eng.mcmaster.ca*
- Consulted with the director of engineering 1, administrators, and instructors about enhancing the Engineering 1 program, as a student voice for over 1000 first-year engineering students.
- Reviewed the Canadian Engineering Accreditation Board (CEAB) Attribute Summary to help evaluate and align the school's goals with standards in engineering education.

Education

B.Eng. in Computer Engineering (Co-op) | **McMaster University** | **Hamilton, ON**   **September 2022—April 2027**
- **Awards**: Faculty of Engineering Award of Excellence Scholarship