

Varun Mathur

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EDUCATION

University of Waterloo

Sep 2023 – Dec 2027

Bachelor of Computer Science, Honours, Co-op | **CGPA: 3.9/4**

Waterloo, ON

- President's Scholarship | Term Distinction | Soccer Intramurals Captain
- **Relevant Courses:** Object-Oriented Programming, Data Structures, Compilers, Probability, Linear Algebra, Algorithms

SKILLS

Languages: Python, TypeScript, Javascript, Java, C++, C, SQL, HTML, CSS

Frameworks: React.js, Express.js, Node.js, Next.js, NumPy, Pandas, Scikit-Learn, LangChain, Tensorflow

Tools: Git, Bash, Docker, Azure, AWS, Power BI, Tailwind CSS, Figma

EXPERIENCE

PointClickCare

Mississauga, ON

Incoming Software Engineering Intern

Sep 2025 – Dec 2025

- Joining an Agile Scrum team to build and deploy **Azure-based healthcare services** impacting millions daily

Definity Financial Corporation

Waterloo, ON

Test Automation Developer Intern

Jan 2025 – Apr 2025

- Designed **CI/CD pipelines** with **Docker**, **Gradle**, and **Allure** to power a release system adopted by **20** teams, validating Guidewire policy flows via automated test reruns and QA reporting
- Spearheaded an **end-to-end testing** framework in **Java** with **Appium** and **Tosca** to streamline cross-platform testing, reducing manual QA effort by **95%** and saving **40 hours** per release
- Refactored **Android** and **iOS** test suites, integrating the **BrowserStack SDK** to enable parallel execution and cut test runtime from **180 minutes** to **80 minutes**

WATonomous

Waterloo, ON

Autonomous Software Engineer

Jan 2025 – Present

- Built an **HD map loader** using **C++**, **ROS 2**, and **Lanelet2** for vehicle navigation, improving positioning accuracy by **25%**
- Co-developed an **obstacle avoidance module** with the Perception team using **Probabilistic Gap Prediction**, improving trajectory success by **35%** in dense environments
- Debugged costmaps-planner issues in **Foxglove** and refined lanelet geometry in **JOSM**, improving navigation stability across **15+** simulations

Alaan (YC W23)

Dubai, UAE

Software Engineering Intern

May 2024 – Aug 2024

- Engineered a **receipt parser** using **Python**, **OpenAI API**, and **AWS Lambda**, replacing a legacy OCR provider and reducing costs by **\$7000/month**
- Architected a customer-facing **AI chatbot** powered by **Next.js**, **PostgreSQL**, and **RAG** with vector embeddings, resolving **30%** of support queries and driving **80+** qualified leads
- Devised a **receipt matcher** using **OCR-parsed JSON** and **AWS S3** to link user-uploaded receipts with Visa transactions, processing **10K+** validations daily

Hewlett Packard Enterprise

Remote

AI Research Intern

Aug 2021 – Oct 2021

- Constructed an air quality forecasting model on **Microsoft Azure** using **Python** and **Decision Tree Regression**, achieving **90%** accuracy in predicting pollutant concentrations

PROJECTS

Knock-Knock 🗨️ | [Next.js](#), [TypeScript](#), [OpenAI API](#), [Overleaf REST API](#), [MySQL](#) | [DEMO](#)

AI-Powered Cold Emailing & Cover Letter Generation Platform

- Developed a **web scraper** automating lead capture from **Apollo.io**, processing **1,000+** prospects monthly
- Automated **cold outreach** by creating and sending **100+** personalized emails daily
- Implemented a cover letter generator, cutting customization time from **10 minutes** to **10 seconds**

LeetDoc 📖 | [Next.js](#), [Typescript](#), [Supabase](#), [OpenAI API](#), [Shadcn/ui](#), [Resend API](#) | [DEMO](#)

AI LeetCode Tracker with Smart Review Scheduling

- Created a **Chrome extension** and **dashboard** that logs user solution and perception, cutting **85%** of manual tracking
- Enabled **AI-powered code explanations** to simplify complex solutions and simulate **pair programming**
- Executed the **SM-2 spaced repetition** algorithm with **Supabase Edge Functions**, triggering personalized review emails