

Yash Aanand

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EDUCATION

University of Waterloo <i>Bachelors in Computer Science (Honours)</i>	Apr. 2029 Waterloo, ON
Selected Coursework: Object-Oriented Software Development, Designing Functional Programs (Advanced), Algorithm Design & Data Abstraction (Advanced), Linear Algebra, Tools and Techniques for Software Development	

WORK EXPERIENCE

Software Engineering Intern <i>IrisGo (Irixion Corp)</i>	Jan. 2026 – Apr. 2026 Mountain View, CA
<ul style="list-style-type: none">Shipped task-automation client features via Electron, TypeScript, and native C++ over OS-level IPCReduced task execution failures by 35% using a local Python agent with MCP and WebSocketsOptimized context cache hit rate by 45% via Go, PostgreSQL, Redis, and Docker-based services	
Software Developer Intern <i>Micromatic Grinding Technologies</i>	May 2025 – Aug. 2025 Bangalore, IN
<ul style="list-style-type: none">Reduced licensing costs by 85% by replacing legacy CNC interface with a custom Windows interfaceAchieved under 10ms latency via Python threads and C++ FOCAS API for real-time CNC dataScaled UI to 40+ production screens using React to simulate end-to-end workflows across machinesDelivered full-stack system with FastAPI and GitHub Actions CI/CD to replace FANUC controllers	
Software Engineering Intern <i>Parkquility</i>	Aug. 2023 – Sep. 2023 Bangalore, IN
<ul style="list-style-type: none">Shipped full-stack features with React, Java, Flask, and MongoDB to accelerate client deliverablesReduced server resource usage by 25% by profiling and refactoring Express.js and Java service endpointsContainerized services with Docker, migrated legacy JS to TypeScript, and deployed via GitHub Actions	

SELECTED PROJECTS

VisuaReader <i>Python, Mediapipe, OpenCV, React, FastAPI, Electron</i>	🔗
<ul style="list-style-type: none">Used OpenCV and Mediapipe to enable hands-free reading via blink detection for motor-impaired usersLeveraged facial landmark ML models to track over 468 facial and 40+ eye region pointsAchieved sub-1s responses and 94% accuracy via EAR-based detection using Mediapipe and OpenCV	
Taxbot <i>Next.js, TanStack, OpenAI Functions, Vercel AI SDK</i>	🔗
<ul style="list-style-type: none">Built a tax-agent app using OpenAI Functions to handle 25+ dialogue flows for scenario-based queriesPrompt-engineered an OpenAI LLM with 1,000+ prompts via Vercel SDK and Next.js Edge FunctionsConfigured 30+ financial outputs for personalized simulations and structured tax summary generation	
ClusterHex <i>JavaScript, jQuery, MongoDB, Express.js, AWS, Heroku</i>	🔗
<ul style="list-style-type: none">Developed a full-stack location review app with secure login, session handling, and user-level access controlEnabled real-time map updates using Mapbox APIs and AJAX-based geocoded event pollingDeployed on Heroku with MongoDB hosted on AWS EC2, supporting 100+ concurrent user sessions	
HashChain <i>JavaScript, Node.js, MySQL, React, SHA256</i>	🔗
<ul style="list-style-type: none">Engineered a custom blockchain ledger using SHA256 to track and verify 500+ product transactionsHashed transactions and stored chain state in MySQL with block integrity checks on every writeIntegrated QR-based lookup to trace product history and validate source authenticity	

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, SQL, C, C++, Java, Go, HTML, CSS

Frameworks: React, Node.js, Next.js, Express.js, FastAPI, Flask, .NET, Tailwind

Tools: MongoDB, PostgreSQL, Git, Docker, GitHub Actions, AWS EC2, GCP, Kubernetes.

Libraries: OpenCV, Mediapipe, TensorFlow, pandas, scikit-learn, Vercel AI SDK, Mongoose