

# Ayan Bin Saif

Toronto, ON | [ayan.binsaif@uwaterloo.ca](mailto:ayan.binsaif@uwaterloo.ca)

 [linkedin.com/in/stitches](https://linkedin.com/in/stitches) |  [github.com/draggle](https://github.com/draggle) |  [ayans.dev](https://ayans.dev)

## TECHNICAL PROFILE

Mathematics student at the University of Waterloo specializing in Full-Stack Development and AI Systems. Experienced in building scalable applications and multi-agent architectures using React, Swift, and Python.

## EDUCATION

<b>University of Waterloo</b>	Honours Bachelors of Mathematics (Co-op)	2025 — Present
Expected Graduation: April 2030		

## TECHNICAL SKILLS

<b>Languages:</b>	Swift, Python, TypeScript, JavaScript, Java, Racket, SQL, HTML/CSS
<b>Frameworks:</b>	Next.js 16, React 19, SwiftUI, Node.js, Tailwind CSS 4, Framer Motion, OpenCV
<b>Tools/Tech:</b>	Supabase (PostgreSQL), Firebase, Google Gemini (RAG), Git, Unix/Linux, Xcode
<b>Core Concepts:</b>	Multi-Agent Systems, Object-Oriented Programming, UI/UX Design, HCI

## WORK EXPERIENCE

<b>Apple — iOS App Developer (Mentorship)</b>	Feb 2024 — Jul 2024
<ul style="list-style-type: none"><li>Engineered native iOS applications using Swift and SwiftUI within an exclusive Apple-sponsored technical mentorship program.</li><li>Architected ‘EduBuddy’ following Apple HIG, resulting in a 25% increase in perceived user navigation efficiency during beta testing.</li><li>Managed the full SDLC from low-fidelity wireframing to final high-performance deployment in Xcode.</li><li>Delivered a high-stakes technical demo to industry executives, highlighting feature scalability and memory management optimizations.</li></ul>	

## PROJECTS

<b>AlphaHedge</b>   Next.js 16, TypeScript, Supabase, Google Gemini	Jan 2026
<ul style="list-style-type: none"><li>Developed an AI-powered investment research platform at the <a href="#">Y Combinator Full-Stack Hackathon</a>, delivering institutional-grade stock analysis in under 2 minutes.</li><li>Architected a multi-agent council using 4 autonomous agents (Fundamental, Quant, Sentiment, Judge) to synthesize independent financial perspectives via a weighted scoring framework.</li><li>Integrated Google Gemini for RAG-based follow-up Q&amp;A, allowing users to query historical analysis via a persistent chat system.</li><li>Implemented real-time data subscriptions and secure authentication using Supabase and PostgreSQL.</li></ul>	

<b>Rate My Rez</b>   React, Firebase, Tailwind CSS	2025
<ul style="list-style-type: none"><li>Launched a full-stack housing platform utilizing React for the frontend and Firebase for real-time data persistence.</li><li>Implemented secure serverless CRUD operations allowing users to manage reviews via Firebase Auth verification.</li><li>Designed responsive UI components that ensured 100% layout consistency across mobile and desktop devices.</li></ul>	

<b>Cheeto-Fingers</b>   Python, OpenCV, MediaPipe	2025
<ul style="list-style-type: none"><li>Developed a touch-free HCI mapping 21 hand-knuckle landmarks to OS mouse events using Vector Calculus.</li><li>Engineered a jitter-buffering algorithm to stabilize cursor movement, reducing sensor noise by 90%.</li><li>Built a custom gesture-recognition engine for media navigation, including precision scrolling and clicking.</li></ul>	