

Dongwan Seoh

(905)-236-1207 | j2seoh@uwaterloo.ca | linkedin.com/in/jamie-seoh | github.com/dwseoh | dwseoh.com/

EDUCATION

University of Waterloo <i>Bachelor of Software Engineering, Honours</i> 2 scholarships awarded Hackathon Winner x3	Sep 2025 – Current 3.96/4.0 GPA
----------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------

EXPERIENCE

Full Stack Developer <i>Nebula — AI-Powered Note-Taking Mobile App</i>	Oct 2025 – Jan 2026 Waterloo, ON
Software Engineer <i>UW Orbital — Satellite Mission Design Team</i>	Oct 2025 – Dec 2025 Waterloo, ON

PROJECTS

Quota — Real-time Financial Intelligence For Codebase	DeltaHacks12 First Place
<ul style="list-style-type: none">Engineered a developer tool to reduce API spend by up to 40% with a VS Code extension and web sandbox.Built extension with TypeScript providing inline cost annotations, heatmaps, and one-click optimizations.Indexed codebases <3s, 45x faster than AI IDEs, using AST parsing to detect inefficiencies in design choices.Designed React Flow sandbox for budget- & scale-aware planning with RAG Gemini chatbot by LangChain.	
Personal CRM — Manage Personal & Professional Relationships	
<ul style="list-style-type: none">Built a robust full-stack CRM with Next.js and FastAPI to streamline professional relationship management.Architected a scalable backend with 30+ RESTful endpoints by pagination and dynamic data fetching.Improved query response by 120ms with normalized schemas, indexing and parameterized queries.Reduced backend server load by optimizing performance using caching layers and rate limiting.Devised matrix-based importance scoring to rank contacts and prioritize key relationships efficiently.	

Melodie.ai

- Developed an **LSTM-based** neural network with **PyTorch** to generate folk melodies, reaching coherent sequences
- Preprocessed MIDI data by **standardizing** keys and **normalizing** sequences for simpler, faster training.
- Designed **probabilistic sampling system** with temp. control and nucleus sampling methods, enabling variation.

TECHNICAL SKILLS

Languages: Python, C/C++, TypeScript & JavaScript, HTML & CSS, SQL, Java, R
Frameworks and Libraries: PyTorch, NumPy, React.js, React Native, Next.js, Svelte, Tailwind CSS, FastAPI, Flask
Developer Tools: Git/GitHub, VS Code, Docker, GCP, Azure, Vercel, Cloudflare, MongoDB, Bash, Figma

EXTRACURRICULAR INVOLVEMENT

Sponsorship Director, Head of Finance <i>Ignition Hacks</i>	Dec 2024 – Current Toronto, ON
<ul style="list-style-type: none">Raised \$10K in sponsorships from partners like Siemens, Deloitte, and UWaterloo to fund a 260-person hack.	

AWARDS

2025 & 2024 Euclid Math Contest	Top 7.6% among all contestants
2025 STEM Fellowship Big Data Challenge Finalist <i>Published academic paper: "Literary Factors Analysis" (DOI #: 10.17975/sfj-2025-001).</i>	