

GABRIEL FAIGAN

 faigan.com

 [437-235-2100](tel:437-235-2100)

 gsfaigan@uwaterloo.ca

 linkedin.com/in/gsaigan/

 github.com/gsaigan

200 University Ave W, Waterloo, ON N2L 3G1

Education

University of Waterloo — <i>Bachelor of Honours Software Engineering</i> Class Academic Rep	Sep 2025 – May 2030 <i>Waterloo, Ontario</i>
Humber College — <i>Advanced Jazz Ensemble</i>	Sep 2017 – May 2024 <i>Etobicoke, Ontario</i>

Skills

Languages: Java, C, JavaScript, TypeScript, HTML, CSS, SQL, Python	Concepts: OOP, Pointers, Linked Lists, APIs, Software Methodology, Prompt Engineering
Frameworks/Tools: React, Gemini API, Git, Swing, AWT, GitHub, GitLab, FastAPI, WordPress, VS Code, Cursor, Claude Code, Linux	Other: Leadership, Time Management, Communication, Detail-Oriented Problem Solving, Team Alignment

Experience

Orbital Design Team <i>Software Team Member</i> Developed CubeStat ground station back-end in Python/FastAPI and front-end in TypeScript to improve system reliability for satellite telemetry, and implement features.	Sep 2025 – Present <i>University of Waterloo</i>
Event Entertainment Band <i>Founder & Band Leader</i> - Founded and managed a professional band performing at 5+ events, coordinating rehearsals and client communications to improve efficiency and client satisfaction. - Led a team of 4 musicians, developing scheduling, workflow, and conflict resolution skills.	Sep 2022 – Present <i>Toronto, Ontario</i>
Snowhawks & The City of Toronto <i>Ski Instructor</i> - Taught 100+ students aged 5–70, adapting techniques to skill levels to increasing student confidence and retention. - Designed personalized lesson plans to improve average student performance by one major ability level per week taught.	Nov 2023 – Mar 2025 <i>Toronto, Coldwater, and Blue Mountain, Ontario</i>
Private Piano Instructor <i>Piano Teacher & Manager</i> - Taught students of varying ages and skill levels piano technique, music theory, and performance. - Adapted lessons to individual learning styles to improve student progress and confidence.	Sep 2024 – Jun 2025 <i>Toronto, Ontario</i>

Projects

Lil Beat Generator <i>JavaScript, HTML, CSS, Gemini API, MIDI</i> beat.faigan.com Developed an AI-powered music generation tool to create MIDI compositions using the Gemini API, enabling users to generate unique melodies, harmonies, and rhythms through natural language prompts.	Nov 2025
Sorting Algorithm Visualizer <i>JavaScript, TypeScript, React, HTML, CSS</i> sort.faigan.com - Built an interactive web application featuring 44 sorting algorithms with live visualization using React and TypeScript to demonstrate algorithm efficiency, complexity, and performance. - Designed responsive UI with custom controls for array size, animation speed, and algorithm selection to enhance educational value and user engagement.	Oct 2025
PulseFire <i>Java, Logic Pro, VS Code, Swing, AWT</i> github.com/gsaigan/PulseFire - Developed a 24-level shooter game in Java using OOP principles, implementing Swing and AWT frameworks with collision detection, physics, scoring, UI, and audio systems. - Created scalable game architecture supporting multiple levels, enemy AI patterns, and progressive difficulty to deliver an engaging player experience.	Jan 2025
Music Production & DJ <i>Logic Pro, Reaper, Audacity, MidiTrail, MainStage, VGM Trans, C++</i> - Developed technical expertise with audio editing software and digital tools to produce and remix 100+ tracks, growing online audience to 1,000+ subscribers. - Programmed VSTs and digital synths in C++ to create custom sounds and modular frameworks for new instruments.	Feb 2017 - Present

Leadership / Extracurricular

Alpha Epsilon Pi Fraternity <i>Member</i> Organized charity events, raised funds, and volunteered for community service initiatives.	Sep 2025 – Present <i>University of Waterloo and Wilfrid Laurier University</i>
--	---