

Yohan Guyomard

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EDUCATION

Massachusetts Institute of Technology (MIT)

Boston, MA

Candidate for Bachelor of Engineering

May 2025

Major in Computer Science & Electrical Engineering; Minor in Mechanical Engineering

Cumulative GPA: 4.8/5.0

Relevant Coursework: Algorithms & Data Structures; Embedded Systems; FPGAs; Deep Learning

How to Make (Almost) Anything; Mechanical Engineering Tools; Web Lab; Autonomous Machines; Software

Construction; Digital Instrument Design; Linear Algebra & Optimization; Computation Structures; Calculus

WORK EXPERIENCE

Formlabs

Somerville, MA

Software Engineering Intern

August 2024

- Developed user-facing features on the Form 4 printer; rapidly ramped up to a large C++ codebase and regularly contributed to tasks beyond the scope of my intern project; assumed the same responsibilities as a full time engineer
- Self-appointed intern project; worked with stakeholders, product managers and other engineers to spec out, implement and test a feature that improves the dimensional accuracy of printed parts

Google

Mountain View, CA

Software Engineering Intern

August 2023

- Integrated support for debugging Android applications in Visual Studio; Interfaced with the LLDB debugger, .NET framework and C#
- Researched Microsoft APIs which lacked documentation using decompilation, source stepping and cross-referencing projects with permissive licenses; documented my findings in a comprehensive 20+ pages document for future maintainers
- Completed every reach milestones, including support for a debugger GUI, local/remote source file mapping and device emulation

Google

Kirkland, WA

Software Engineering Intern

August 2022

- Adapted to proprietary frameworks and internal tooling in one week; contributed to a large codebase
- Implemented the UI, backend, and unit tests for Chrome Web Store's search autocomplete feature
- Took on a secondary, full-stack feature within CWS; equivalent to two internship projects

PROJECTS

3D Printed CNC Mill

July 2024

- Designed and fabricated a mill using almost exclusively 3D printed parts for a 48h hackathon; spearheaded the project direction, using prototypes and research documents to convey my vision to other engineers
- Developed a custom driver board and firmware; written in C++, it executes G-Code sent wirelessly through a web interface

Raytracer on \$4 Embedded Hardware

September 2023

- Pushed the limits of the Raspberry Pi Pico by implementing a voxel (e.g. Minecraft) renderer that runs in real time
- Incrementally improved performance through hardware and software optimizations: authored LCD display drivers that are many times faster than alternatives; made use of the RP2040's two cores; overclocking; bare metal Rust code; fixed-point arithmetic

ADDITIONAL

Technical Skills: C/C++, Rust (5 years); Python (4 years); Java, Kotlin, C# (6 years); Full-stack web (6 years); SQL (2 years)

Languages: Fluent in French, English

Tools: Adobe Photoshop; After Effects; Final Cut Pro; Blender; JetBrains IDEs; Visual Studio Code; Git; Unity; Fusion360

Interests: Piano; Embedded Programming; Electronics; Semiconductor device fabrication; 3D modeling; Web Development