



Liam Hanrahan

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EDUCATION

Massachusetts Institute of Technology

Pursuing Bachelor of Science in Electrical Engineering with Computing

- GPA: 4.75 / 5.0

Expected Graduation May 2029

Cambridge, MA

PROJECTS

RISC-V Processor

outercloud.dev/blogs/riscv-1

- RISC-V 32l processor design in Chisel
- Synthesized design on FPGAs for emulation
- Capable of running DOOM live on FPGA

Animoo

github.com/outercloudstudio/animoo

- WebGPU motion graphics rendering library
- Fully web embeddable GPU rendering of fonts and other vector shapes

bridge. IDE

bridge-core.app

- Full featured open source IDE for Minecraft Bedrock development
- Rust backend + Typescript / Vue frontend

WORK EXPERIENCE

Undergraduate Researcher

Jun 2026 — Present

Foundations of Machines and Languages Lab, CSAIL, MIT

- Full Time 40 Hours / Week
- Developing improved RTL Compilation Flows for FPGA
- Implemented a Systolic Array and other designs in HardCaml

Minecraft Bedrock Developer

Sep 2024 — Jan 2026

Starfish Studios

- Part Time 15 Hours / Week
- Developed official Minecraft x Disney and Minecraft x Universal DLCs with TypeScript

Minecraft Bedrock Developer

Oct 2022 — Dec 2022

Cubed Creations

- Part Time 10 Hours / Week; Developed gameplay with JSON behaviours, Python, and Molang

AWARDS

Battlecode 2026 Finalist

Jan 2026

- Lead *3MiceWalkIntoABar* to finals as first time participants
- Received 8th place among university teams
- Developed and open sourced distributed infrastructure for fast bot verification

Best Hardware GoatHacks

Jan 2026

- Developed self hosted live streaming video camera doorbell
- Microcontroller programming

2nd Entertainment Track MakeMIT

Feb 2026

- Volumetric display in only 24 hours
- High performance C code for rendering a rotating volumetric display

SKILLS

- Programming Languages:** TypeScript, Rust, OCaml, Python, Go, C, C#, Java, Lua
- Hardware:** FPGA Programming, System Architecture, VLSI / Chip Design, Chisel, RISC-V 32l Assembly, Microcontrollers