Fmilien Breton

EXPERIENCE

November 2022 - Present Hack the Hill

SOFTWARE ENGINEER - INFRASTRUCTURE TEAM

Ottawa

Zeptile Software

October 2022 - Present

SOFTWARE ENGINEER

Remote from Ottawa

October 2022 - Present

Ottawa

OWNER / OPERATOR uOttawa CS Club

Student Works

June 2022 - Present

CLUB EXECUTIVE University of Ottawa

· Collaborated with students in team of 3 to organize various small-scale social events and meetups in Ottawa by organizing talks and designing promotional posters using Figma

• Took initiative in wide variety of tasks such as updating outdated information on 6 club website, redesigning logo using using Figma, refreshing 6 Discord server, and creating internal Notion workspace to improve short-term planning

PROJECTS

Personal Website

A PORTFOLIO FOR SHARING VARIOUS PROJECTS

JavaScript • HTML • CSS • Markdown • Next.js

- · Designed and implemented appealing UI and optimized UX using Google Search Console resulting in over 2500 unique visitors a month
- · Utilized Cloudflare caching system and optimized site-wide accessibility resulting in Lighthouse score consistently over 95%

® Stack-Based CPU

AN ASSEMBLER AND EMULATOR FOR A CUSTOM STACK-BASED CPU ARCHITECTURE

Rust · Assembly

- · Wrote stack-based emulator in Rust that supports 44 CPU instructions and graphics through 32x32 grayscale display buffer
- · Wrote simple assembler to resolve labels and convert Assembly source files into custom binary
- Proved custom instruction set Turing complete through @ implementation of Conway's Game of Life from scratch in Assembly language

O DBLess Password Manager

A HASH-BASED, DATABASE-LESS PASSWORD MANAGER

Python · JavaScript · HTML · CSS · Next.js

- Developed 🔗 custom cryptographic procedure based on SHA-256 to deterministically generate passwords on demand instead of encrypting them
- Built @ cross-platform PWA with Next is that loads 2FA tokens, generates passwords and copies them to user's clipboard for convenience

March 2022 **𝚱** Legacy Protocol

SUBMISSION FOR DEFI THE CONVENTIONAL 2022

JavaScript • React • Rust

- · Won first place in Finance category of Canada's largest DeFi hackathon along with 2500\$ prize as part of 3-member team
- Built 6 MVP smart contract backend from scratch in Rust with no prior experience in Web3, all within tight 36-hour timeframe

More on & GitHub and in & Portfolio

FDUCATION

University of Ottawa

BSC WITH HONOURS IN COMPUTER SCIENCE

Dropped out after first year

CONTACT

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github/

Bricktech2000

linkedin/in/ in emilien-breton

SKILLS

Programming Languages

Python • JavaScript • Rust • C++

Development Tools

Linux · Neovim · Git · GitHub

Frameworks

React · Node.js · Next.js · Express.js

Other Technologies

HTML · CSS · JSON · YAML • Markdown LaTeX • C • Assembly • Raspberry Pi · Arduino · VS Code · Figma · Notion

OTHER

Languages

French Native English Native Spanish Intermediate

Russian Elementary

Interests

Electronics · Ø Robotics · 3D Printing • 🔗 Drone Building • Finance & Investing • Productivity • Music

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