Kleidi Bujari

mail@kleidi.ca | Github | Personal Website | LinkedIn

Education

Toronto Metropolitan University

Expected May 2024

BEng. Computer Engineering

Toronto, Canada

Skills

Languages: Rust, TypeScript, C/C++, Python, VHDL, MATLAB

Technologies: Linux, Git, Docker, Kubernetes, Embedded Systems, Analog Circuit Design

Spoken: English, French, Albanian

Experience

WSP Canada

May - Aug. 2021, May - Aug. 2022

Student Inspector Toronto, Canada

- Tested electrical designs for power consumption, cost efficiency, and viability with existing systems
- Participated in extensive reviews and adjustments for various engineering design pipelines
- Collaborated with industry experts to verify large scale electrical, mechanical, and structural work
- Automated several workflows for team members, decreasing time spent on reports by 40%

Projects

Rorrim | Fetch and sort/filter Arch Linux mirrorlist for use with system updates

Rust

- Optimized algorithm to sort and filter through 1 MB of JSON data in 10ms based on user input
- Leverages modern Rust features to ensure memory safety, fast runtime, and wide compatibility

Personal Website | All-In-One website, blog, portfolio, and testing site for future software

Svelte

- Hosted on local hardware with self-provisioned certificates and automated build-on-commit
- Page caching and asset compression result in 0.45s to see content, 1s for full page load with all assets

STM32 Circuit | Custom STM32 PCB for competion robotics team (R3 Robotics)

EasyEda

- Designed custom PCB for interfacing with STM32 IC including programming, and peripheral I/O
- Built-in passive safety features and compiled documentation for team members

Genny | Linux-native hardware entropy based random string generator

C

- Standard output to maximize compatibility with other CLI programs by Unix pipe interface
- Minimal and fast, outputs 1,000,000 random characters to stdout in <1.0 seconds

Home Server | Local server running several web-facing utilities and services

Proxmox

- Assembled and maintain various services such as WireGuard VPN, OPNsense Firewall, and more
- Integrates Proxmox hypervisor to allow VM, LXC, Docker, and K8s deployments based on requirements

General Purpose Processor | Custom 16-bit ALU core written in VHDL with Intel Quartus

VHDL

- Designed all components from scratch, including latch, 4:16 decoder, finite state machine
- Implemented and optimized various operations: adding, subtracting, shifting bits, etc