IVY LU

FIRMWARE SOFTWARE DESIGNER

IVY@IVY.LU
(650) 695 2882

I'VE WORKED WITH

Angular **SvelteKit** **NodeJS**
Deno **Docker** **Git** **GitHub**
Jenkins **NGINX** JavaScript
TypeScript **Go** **C** C++ Python
MySQL MongoDB DigitalOcean
AWS Azure **nRF52/nRF53**
nRF SDK ESP32C3/ESP32C6
Zephyr RTOS Verilog
FPGA (Intel Altera DE-10)
Teamwork & Creativity
Communication & Initiative

MORE ABOUT ME

+ open-source portfolio
+ skilled UI/UX designer
+ HW design experience
+ strong technical writing
+ highly multidisciplinary
+ fast to learn & adapt

RELATED COURSEWORK

+ Computer Architecture
+ Embedded Systems
+ Operating Systems
+ Computer Networks
+ Digital Signals & Systems

EXPERIENCE

FIRMWARE INTERN + RETURNING — LEVEL HOME

Summer of {2024, 2025} • Full-Time • In-Office • Compensated

[2025]: Hardware evaluation for analog power measurement, investigated and debugged parts for comparator circuitry, amplifiers, buck-boost power supplies including in firmware (C). Developed FW platform for test hardware, time-critical components. A/B testing.

[2024]: Developed SW platform for robust test execution, CI integration, and hardware fleet management in Go.

INDEPENDENT CONTRACTOR — LEVEL HOME

2023 - 2024 • Part-Time • Hybrid • Compensated

Developed internal MDU tools, provisioning software (Python), fleet management UI, and 3D visualization tools (SvelteKit, three.js).

VP OF INFRASTRUCTURE — PINNACLE

2021 – 2023 • Previously I.C. • Part-Time • Volunteer

Led team for creating attendee experiences: custom social platform, event portal, and public website. Improved team DX with new libraries, docs (SvelteKit, NodeJS, Express, MongoDB, Docker, deployed on AWS).

PROJECTS

PI*CC3200*TIONARY — UC DAVIS

2026 • Embedded Systems Class Project • *C, Go, Svelte* & *Docker*

Internet-connected live drawing/guessing game built with TI CC3200 microcontroller, sensors, and display. C firmware with custom-written websocket handler. Drivers use I2C and SPI. Go server (custom text protocol over websocket) for livestream/internet functionality. Awarded best project in class section by TA. https://app.ivy.direct/picc3200tionary.

MURA — @IVYNYA/MURA

2023 – 2026 • FOSS on GitHub • *Go, SvelteKit, Docker, Nginx*

A delightful web scheduler for coordinating meeting times.

30+ MORE PROJECTS DOCUMENTED AT HTTPS://IVY.LU, MY INTERACTIVE PORTFOLIO

EDUCATION

SAN JOSE STATE UNIVERSITY

2026-2028 • MS Computer Engineering

UNIVERSITY OF CALIFORNIA, DAVIS

3.8 GPA • 2024–2026 • BS Computer Engineering • *Tau Beta Pi*

FOOTHILL COLLEGE

4.0 GPA • 2022–2024 • AS-T Computer Science • *CS Club*

portfolio ····· ivy.lu/portfolio
github ····· ivy.lu/github

Zephyr Project Technical Contributor

ivy 2026