

LENA VOYTEK

lena@voytek.dev

WORK EXPERIENCE

Canonical - Remote

October 2021 - Present

Software Engineer - Ubuntu Server

- Open source package maintenance for Ubuntu and Ubuntu Server
- Lead maintenance on MySQL and Django for Ubuntu
- Help to maintain additional packages: libvirt, swtpm, open-iscsi, exim4, etc
- Provide patches and features to Debian and upstream projects
- Triage bugs reported by the Ubuntu community

Garmin International - Tucson, AZ

September 2020 - October 2021

Embedded Software Engineer

- Elected as software team lead for multiple handheld dog training and tracking products
- Developed firmware for GPS and RF dog devices using Garmin's RTOS
- Developed embedded C++ graphics library for OLED screens
- Created application for validating GPS accuracy on a device

Jacobs Technology - Fort Huachuca, AZ

May 2020 - September 2020

Embedded, Electrical, and 3D Engineer

- Developed firmware for microcontroller projects
- Developed code for Xilinx Zync FPGA
- Used HAAS and Fryer milling machines for creating metal device cases
- 3D modeled and printed custom device cases

Jacobs Technology - Fort Huachuca, AZ

May 2018 - May 2020

Firmware Engineer

- Created Firmware for various microcontroller projects focused on testing RF electronics
- Developed PCBs and determined hardware requirements for prototype devices

EDUCATION

University of Arizona

August 2016 - May 2020

Bachelor of Science, Electrical and Computer Engineering

Bachelor of Science, Computer Science

Minor, Mathematics

PROFESSIONAL

Ubuntu

October 2021 - Present

Ubuntu Core Developer

Debian

October 2021 - Present

Debian Maintainer

Institute of Electrical and Electronics Engineers (IEEE)

October 2018 - May 2020

Student Vice President, Treasurer, Security Officer

Phi Sigma Rho - Alpha Kappa Chapter

February 2018 - May 2020

Vice President of Philanthropy, Director of Professional Development

PROJECTS

Discourse Triage

October 2021 - Present

Canonical - Remote

- Command line interaction with Discourse forums to get updates on changes
- Written in Python, packaged as a Snap
- <https://github.com/lvoytek/discourse-triage>

Tracking and Training Handheld Dog Device

September 2020 - October 2021

Garmin International - Tucson, AZ

- Elected software team lead of the project
- Implemented portions of OLED graphics library in C++
- Implemented training commands to collar over 27MHz radio

Implantable Medical Device Middleware Cybersecurity

December 2019 - August 2021

University of Arizona - Tucson, AZ

- Middleware framework to control secure access to sensors and data
- Interacts with ARM TrustZone secure enclaves and user applications

UAV with Live Video Feed Controlled over a Cellular Network

August 2019 - May 2020

General Dynamics Mission Systems + University of Arizona - Tucson, AZ

- Built a custom, 1m wide drone
- Used an ESP-32 microcontroller to control drone autonomously and send data to user over LTE
- Created Web-based dashboard for tracking encrypted location and live video feed

Scalable Microcontroller Ultra-Wideband Multilateralization

July 2019 - May 2020

Jacobs Technology - Fort Huachuca, AZ

- Device for determining exact location in GPS-denied Environment
- Wrote asynchronous time of flight sensing and mesh firmware
- Interacted with Ultra-Wideband transceiver using SPI protocol

GPS + Audio Event Recorder

June 2019 - August 2019

Jacobs Technology - Fort Huachuca, AZ

- Allows test engineers to mark down events with GPS and I2S Microphone
- Developed firmware in C for Cortex M4 Processor
- Developed PCB for compactly connecting all components

TECHNICAL SKILLS AND QUALIFICATIONS

Programming Languages	C, C++, Go, Rust, Verilog, TypeScript, JavaScript, Python, C#, L ^A T _E X
Software	VS Code, Vivado, LibreOffice, MS Office, Fusion 360, Altium, Pspice
Operating Systems	Ubuntu, Debian, Arch Linux, Mac OS, Windows
Familiar Architectures	ARM, AVR, MIPS, RISC-V, x86