

JEMMA POFFINBARGER

EMBEDDED SYSTEMS ENGINEER

CONTACT

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EDUCATION

B.S. Computer Science

University of Wisconsin: Platteville
May 2023

SKILLS

- Communication
- Teamwork
- Project Management
- CI/CD
- MC/DC

LANGUAGES

- Python
- TypeScript
- Swift
- C / C++
- QT/QML
- Java
- HTML/CSS

SOFTWARE

- Docker
- Git
- Linux
- GitHub
- Intrepid Vehicle Spy 3
- QT Squish
- ECU-Test
- Wireshark
- MQTT

WORK EXPERIENCE

Embedded Systems Engineer I

RFA Engineering, Dubuque, IA | Jul 2023 – Present

- Working on-site at John Deere Dubuque Works
- Evaluated software requirements and developed automated and manual test plans for an embedded Linux display for various construction equipment
- Developed tooling to assist in executing test plans
- Created and maintained CI/CD pipelines to assist in executing test plans and generating report outs
- Worked directly with software and systems engineers to determine root cases for discovered defects and drive quality solutions
- Assisted in delegating work and planning future releases around changing timelines for different stakeholders

ITS Hardware Staff

University of Wisconsin: Platteville, Platteville WI | Mar 2022 – May 2023

- Managed and deployed computer hardware assets
- Assisted customers with technology concerns
- Aided in the decommissioning of outdated hardware in an environmentally responsible manner

Directory of Ecology and Conservation

Crystal Lake Scout Reservation, Rhinelander WI | May 2021 – Aug 2021

- Developed lesson plans for a variety of outdoor education topics
- Led instruction of merit badges for class sizes ranging from 10-40 people
- Assisted in developing and executing camp programming

PROJECTS

Pretendo Network

2019 – Present

- Open-source replacement game servers for the Wii U and 3DS with over 500,000 users
- Contributed to the development of on device patches to connect to the network without permanently modifying the system
- Reverse engineered and re-implemented various proprietary web APIs to support different system functions

Harman-Kardon Invoke Firmware Modification Tool

Present

- Developed tooling to flash custom firmware onto the discontinued Harman-Kardon Invoke smart speaker
- Reverse engineered internal processes and reimplemented interfaces with the device hardware
- Began architecting a new Linux filesystem using Buildroot