

Daniel E. Ripka

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Education

Bachelor of Science in Computer Engineering
University of Wisconsin - Milwaukee, May 2023

Skills

- C, C++, Python, Java, Scala, Javascript, HTML, CS
- Pandas, Matplotlib, Numpy, Scikit-Learn, Django
- Git, SVN, FreeRTOS, CppUTest, JUnit, SDL2
- Bash, Powershell, LTspice, Oscilloscope
- Visual Studio Code, Eclipse, Microchip Studio, Renesas HEW, IAR embedded workbench
- Windows 11, Ubuntu
- VirtualBox, WSL, Microsoft Office, LibreOffice
- Embedded software development, Scrum
- PC hardware repair and upgrade/replacement
- Built/rebuilt 15+ computers with various hardware specifications

Experience

Badger Meter - Brown Deer, WI

Firmware Engineer, since June 2023

- Developed new firmware applications and drivers for Orion Cellular Endpoints in C and C++.
- Designed and developed FreeRTOS task scheduling algorithms to report data on time.
- Designed and developed support for a new communication protocol using interrupt driven UART.
- Developed CppUTest unit tests for validating firmware revisions.
- Visual data analytics on field devices using Python Pandas and Matplotlib.
- Electronics environmental testing and battery current and power measurements.

Columbus McKinnon Corporation, Magnetek - Menomonee Falls, WI

Associate Engineer, from July 2021 to June 2023

- Developed a desktop app using PyQt to automate testing and monitor variable frequency drive parameters over Modbus serial protocol, improving firmware testing procedures.
- Developed firmware to control overhead crane slowdown behavior after enabling a limit switch, improving operating space without risking safety. Integrated support for a laser device in this algorithm.
- Developed firmware designed to simulate a crane load on a hoist using a motor.
- Designed, developed, and implemented firmware validation tests.
- Migrated data and verified and validated specifications for a new project in development.

Amazon Fulfillment Center - Oak Creek, WI

Packer, from May 2021 to July 2021

- Packed 60+ packages per hour.
- Built boxes and secured items with dunnage to protect them from shipping damage.
- Sealed boxes before they are shipped out.
- Assisted other associates to ensure all resources at each packing station are available.

University of Wisconsin - Milwaukee, Campus Technology Support - Milwaukee, WI

Desktop Support Technician, from September 2019 - March 2020, September 2020 - May 2021

- Responded to incidents and requests for Windows and Mac OS systems.
- Answered phones and contacted clients regarding their submitted tickets.
- Configured and solved problems with desktops, laptops, software, and accessories.
- Provide on-site support including new hardware setup, computer imaging, and deployment.
- Logged all client problems, contacts, and solutions using incident management software.
- Gave users requested permission to access certain software or networks.
- Managed assets by sorting, logging, and organizing information about computers and accessories.

Sendik's Food Market - Franklin, WI

Cashier, from October 2017 to August 2019

- Collected payments and made change for transactions.
- Presented customers with a positive checkout experience.
- Helped customers sign up for new services and take advantage of special offers.
- Responsible for opening/closing the store.
- Assisted other departments as needed.

Greendale Lions Club - Greendale, WI

Volunteer, since July 2021

Assembled wireless technology, networking, and payment systems for seasonal events.