

Stuart Miller

Software Engineer

CONTACT

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(816) 785-4105



Pella, IA



EDUCATION

MS Computer Engineering

Missouri University of
Science & Technology

Rolla, MO

August 2017 - May 2019

Emphasis in Embedded Systems

BS Computer Engineering

Missouri University of
Science & Technology

Rolla, MO

August 2013 - May 2017

**Minors in Computer Science &
Mathematics**

SKILLS

C / C++

Linux

Autonomy / Autonomous Systems

Qt & QML

System Design

SAE J1939 - CAN bus

Git Version Control

CI / CD

Unit testing

JIRA project management

Hardware troubleshooting

Electronics test equipment

CERTIFICATIONS

FAA Part 107 Commercial UAS

Pilot

EXPERIENCE

Auterion

Remote

Senior Software Engineer

Feb. 2024 – Present

Software Engineer

Oct. 2022 – Feb. 2024

- Technical Lead for QGC-Gov, a Qt/QML-based ground control station for unmanned aerial systems (UAS).
- Design and implement system level autonomy, through close work with DoD's Defense Innovation Unit on Artificial Intelligence for Small Unit Maneuver (AISUM) program to develop a "swarm controller" for multi-UAS operations.
- Plan and execute a complete redesign of the QGC-Gov frontend and backend in order to promote modularity with an emphasis on new and upcoming programs with unique design constraints.
- Collaborate with industry partners to develop RAS-A, an interoperable standard used across the government's UAS portfolio.

Vermeer Corporation

Pella, IA

Embedded Software Engineer II

May 2021 – Oct. 2022

Embedded Software Engineer I

May 2019 – May 2021

Embedded Software Engineer Co-Op

May 2018 – May 2019

- Developed machine control software for Vermeer's next generation horizontal directional drills using C/C++ and Simulink and display software in Qt/QML.
- Architected the software, hardware, and system integration of a common platform for all next-generation horizontal directional drills, designing for current and future needs such as automation and operator-less machines.
- Worked extensively on common hardware abstraction layer C code, integrating multiple hardware variants into a consistent core layer.
- Collaborated with hardware vendors to introduce new controller hardware, purpose-built for Vermeer's needs, and oversee its adoption into the existing programming environment.
- Completed an accelerated project to port legacy software to new hardware when supply chain constraints threatened key product lines.

Garmin International

Olathe, KS

Embedded Software Intern, Aviation

Oct. 2015 – May 2016

Boeing

St. Louis, MO

IT Intern, Business Systems Data Warehouse & Analytics May 2015 – Aug. 2015