## **CONTACT**

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| --- | --- |
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| [linkedin.com/in/stuartmillerdev](https://www.linkedin.com/in/stuartmillerdev) | THE NEW LINKEDIN LOGO PNG 2022 |
| (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