## CONTACT

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| --- | --- |
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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

Matlab / Simulink

CI / CD

Unit testing

JIRA project management

Hardware troubleshooting

Electronics test equipment

## EXPERIENCE

Auterion*Remote*

Senior Software Engineer Feb. 2024 – Present

Software Engineer Oct. 2022 – Feb. 2024

* Develop software in C++ for Auterion's government programs, including QGC-Gov, a ground control station for unmanned aerial systems (UAS).
* Work closely with the DoD's Defense Innovation Unit on Artificial Intelligence for Small Unit Maneuver (AISUM), a program to develop a "swarm controller" for multivehicle, autonomous UAS operations.
* Oversee the system design and vehicle integration of a new VTOL platform into the AISUM autonomy system.
* Plan and execute a complete redesign of the QGC-Gov frontend and backend to better support the needs of multivehicle autonomy, extensibility and modularity, system-level mission planning, and more.
* Collaborate with industry partners to develop RAS-A, a low-level interoperable communication 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