

Education

Iowa State University

Fall 2019 – Present

- Bachelors of Science in Software Engineering
- Cumulative GPA: 3.98 / 4.0
- Anticipated Graduation Date: May 2022

Key Skills

- Experience developing with Linux and Windows
- Fluent in Java, Bash scripting, C, C++, C#, Python, ColdFusion, VBA, HTML, and CSS
- Previous experience with Unity, Git, Spring, MySQL, Eclipse, Visual Studio, and SAP

Work Experience

Boeing Internship, Visual Systems Software Engineer

Summer 2021

- Assisted R&D of a Unity based virtual reality training system for Boeing fighter jets
- Significantly improved immersion through stick and throttle position pass through and a new sound system to allow for audible warning, caution, and advisory cues
- Added new training scenarios to train pilots and maintainers on emergency procedures
- Utilized cutting edge VR and MR technology including finger tracking, image pass through, and eye tracking

Boeing Fellowship with ISU, Open UAS

Fall 2020 – Present

- With Boeing's support, I worked with the Iowa State Open UAS research team to develop open-source autonomous flight software for unmanned aircraft in 2020-2021
- Became team lead for Electrical/Software sub-team in Fall 2021. Currently developing additional features including flight simulation, autonomous landing, and improved reliability

John Deere, Part-Time Student

Summer 2019 – Summer 2020

- Performed as a member of a small team to maintain and develop internal web utilities through ColdFusion, HTML, and JavaScript
- Worked to decrease processing time by as much as 98% for SAP part acquisition tasks through VBA macros

Involvement

FIRST Robotics Competition, Mentor

Fall 2016 – Present

- Currently functioning as lead programming mentor for high school robotics team
- Acted as team captain in 2018, lead a team of 15 to 20 students
- Head of robot programming for two years (2016-2018), providing problem solving and teamwork experience

Publications

OpenUAS Version 1.0, IEEE

Spring 2021

- Coauthored the OpenUAS team's first publication. Contributed to the electronics and software section, writing about the software setup and simulation advancements.
- Peer reviewed and accepted at the 2021 International Conference on Unmanned Aircraft Systems. DOI: 10.1109/ICUAS51884.2021.9476814