Cameron Falls

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Education

Missouri University of Science & Technology

May 2023

B.S. Computer Science GPA: 4.0/4.0

Courses: -Computer Networks -Linear Algebra -Algorithms

Experience

Multirotor Design Team

Rolla, MO

Chief Software Engineer Aug 2022 – Present

Directed the software team in a sprint-based development cycle in order to meet targets for competition completion.

• Coordinated between hardware and software teams to ensure successful deployment of autonomous code to drone.

Ameren O'Fallon, MO Remote

Digital Software Intern May 2022 – Aug 2022

 Created an Oracle SQL database and PowerBI dashboard to track support tickets with a third-party in an effort to generate useful metrics to grade the level of support that Ameren receives.

Updated AutoSys scripts to improve reliability and process flow in order to reduce error occurrence.

Multirotor Design Team

Rolla, MO

Computer Vision Team Member

Aug 2019 – Aug 2020, Aug 2021 – Aug 2022

- Developed advanced computer vision algorithms to process camera data and provide relevant information to the flight team.
- Implemented an algorithm to detect the location of a module by using NumPy and OpenCV to find the four holes on the module, filter out noise, and calculate the center point, which enabled the flight team to attempt retrieving the module.

Ameren O'Fallon, MO Remote

App Development Student Co-op

May 2021 – May 2022

- Utilized Python to automate the updating of supervisor contacts by querying an employee database for current location and contact information in an effort to allow workers quick access to area supervisor names and phone numbers.
- Designed a script to create patrol points and associate points with previous data using ArcPy geoprocessing tools in order to assist vegetation ground patrol teams.
- Created scripts to generate and email PDF documents based on input to safety forms with the aim of providing confirmation and documentation of safety inspection results to inspectors.
- Developed JavaScript widgets to display a moving radar and lightning strikes on a web map for use by the transmission operations team to identify hazards that can cause outages.

Multirotor Design Team

Rolla, MO

Computer Vision Team Lead

Aug 2020 - Aug 2021

- Led and mentored members of the vision team to work together to achieve competition goals.
- Managed computer vision software development by creating and assigning tasks to vision team members in an effort to make progress towards objectives.

Skills

Languages and Libraries: -Python -C++ -NumPy -OpenCV -SQL

-JavaScript -Java

Technical: -Git -Unit Testing -Linux

Honors & Activities

- Graduated Summa Cum Laude from Fort Zumwalt West High School in May 2019 with 3.9/4.0 GPA.
- Learned about organizing data to identify trends through peer collaboration and mentor instruction in ACM Data from August 2019 to September 2020. Used Python to process, organize, and analyze data.
- Aided in raising environmental awareness as part of Environmental Club from February to May 2016.