MATTHEW DIM

Computer Science

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(571) 455-6075

Reston, Virginia

in MDim0330

MDim0330

SKILLS

Java | C/C++ | Python

Ruby CSS/HTML Vim

MatLab Solidworks

Microsoft Office

LEARNING

Artificial Intelligence

Machine Learning

Computer Systems

Data Structures

Advanced Algorithms

Calculus | Lin Algebra

Differential Equations

Discrete Structures

Robotics Chemistry

Engineering Design

HOBBIES

Debate Team

- Wyoming Tournament **Novice Champion**
- Rutgers 3rd Place Speaker Award

Cycling

• Century (100 mile race)

ABOUT ME

Enthusiastic Computer Science Student eager to contribute to a technology related project. Motivated to learn, grow and excel in a hardware or software related industry.

EXPERIENCE

Software Engineer Intern | Sedna Digital Solutions

i 06/2022 - 01/2023

- Manassas, Virginia
- Created tools for the conversion of C library into other programming languages using WSDL and Protobuf
- Facilitated integration of Java tools with C programs using reflections

EDUCATION

Bachelor of Science: Computer Science | James Madison University

2019 - 2023

Harrisonburg, Virginia

- GPA: 3.56
- Minor in Mathematics
- Minor in Robotics

Master of Science: Computer Engineering | Virginia Tech

2023 - Current

Virginia

RESEARCH

Autonomous Vehicle - JACart | 😯 | 🌐



- **1** 01/2022 05/2023
- Paid Research Assistant Robotics Operating System (ROS) Team Lead
 - Goals: Improve upon the collision avoidance of the vehicle
 - Integrated ZED cameras with LiDAR sensor for collision avoidance
 - Pose tracking with machine learning for passenger safety detection

REFERENCES

References provided upon inquiry



PROJECTS

Buoy Project | 😯 | 🌐





- **1** 08/2020 05/2021
- Advised by Northrop Grumann
- Communication Team Member
 - Worked on integrating Raspberry Pi, Lowra, and Sensors
 - System achieved autonomous state

FitBit Project - Step Counter | 😽 | 🌐

- iii 09/2021 Current
- Using micro-processor, acceleration sensor, and radio integrated system using a selfdeveloped foot-step algorithm
- Accurate up to 5 percent currently