

Isaac C. Subudhi

Contact

Goochland, 23063 • isaac.subudhi@gmail.com • 804-904-7186 • [Github](#)

Education

Reynolds Community College Richmond, VA
AAS, Social Sciences • 2023 - Expected 2025

Goochland High School Goochland, VA
High School Diploma • 2021 - Expected 2025

Experience

High School FIRST Robotics Team Goochland, VA
Student, Lead Programmer, Mentor • 2021 - 2025

FIRST Dean's List Semi-Finalist Award

- Gained extensive leadership and communication skills.
- Main programmer for the 2023, 2024 and 2025 seasons.
- Experience working with Java & Kotlin codebases.
- Developed vision systems using odometry and fiducials.
- Integrated mechanical systems from CAD into software.

Robotics Team Website Development Goochland, VA
Webmaster • 2023 - 2025

- Designed and developed the team's website using HTML, CSS, and JavaScript.
- Implemented bootstrap and CSS elements for viewing across different devices.
- Enabled simple SEO optimization and analytics

Leadership & Activities

Programming Lead, High School FIRST Robotics Team 2023 - 2025 • Goochland, VA

- Led a team of programmers to develop software for competition robots.
- Mentored newer members to learn Java through interactive lessons.
- Coordinated with other team members to ensure integration of hardware into software components.

STEM Summer Camp Mentor Jun, 2024 • Goochland, VA

- Mentored a week-long STEM focused summer camp that taught aspiring engineers the skills they need to build a competition ready robot.
- Coordinates lesson plans and slideshows with staff.
- Worked with different groups of students.

Middle School Robotics Mentor Dec, 2023 - Jan, 2024 • Goochland, VA

- Helped found a new rookie FIRST Tech Challenge Middle School robotics team with other students. Focused on bringing long term sustainability for future members.
- Taught students engineering concepts, block based programming, and electronics.

KidWind Wind Turbine Competition

Feb, 2024 - Mar, 2024 • Goochland, VA

- Designed a wind turbine using rapid prototyping and new 3D printing technologies.
- Competed against other high schools whilst earning second place award.

Community 3D Printing

2022 - 2025 • Goochland, VA

- Upgraded, maintained, and built a variety of 3D printer systems.
- Produced parts for the community ranging from high-stress brackets for the robotics team to simple hinges for school recycling bins.
- Gave guidance to students and teachers willing to learn about 3D printers.

Skills & Interests

CAD Design & Mechanical Design

- Designing parts and assemblies in CAD software such as OnShape.
- Enabling quick and efficient 3D printing of such parts.
- Utilizing new and upcoming concepts in engineering.

Computers & Operating Systems

- Donating & repairing older laptops and desktops to the community
- Experience in GNU/Linux based systems (Ubuntu & Fedora)
- Managing operating systems and applications
- Creating circuit board designs

Programming & Apps

- Arduino applications with C++
- SQL Postgresql Database Project
- Extensive app development inFlutter with Dart
- Python based projects and using APIs
- AI and prompt engineering
- C# Unity & GoDot Code