**EDUCATION**

University of Notre Dame, Notre Dame, IN

College of Engineering, Bachelor of Science in Computer Science May 2022 Science and Engineering Scholar GPA 3.84

**SKILLS**

Languages: Python, C++, C, Java, JavaScript, HTML, XML, ARM, Verilog, MATLAB

Tools: GitHub, GitLab, SolidWorks, Arduino, Raspberry Pi, Quartus

Protocols and Schemes: RSA Encryption, ElGamal Encryption, I2C communication, SPI communication

**EXPERIENCE**

Microsoft Explorer Intern, Virtual ExperienceMay 2020 – July 2020

* Collaborated with interns, Software Engineers, Program Managers, and Engineering Managers on the Outlook Desktop team to implement UX and UI updates while maintaining functionality and accessibility

Tapia Celebration of Diversity in Computing Conference, San Diego, CA September 2019

* Selected from a pool of applicants from the Computer Science Department to participate in the 2019 Tapia Conference and engaged with industry leaders through professional development workshops and technical panels

Robotic Football Club, Code Team Member, Notre Dame, IN November 2018 – Present

*Quarterback Re-design Project August 2020* – *Present*

* Leading a group of code team members to program the re-deigned quarterback robot. The new QB will run a python code base on a Raspberry Pi processor, utilizing SPI and I2C communication protocols.

*Spot-Passing Project January 2019 – April 2019*

* Implemented new programming strategies for the autonomous passing abilities of the quarterback robot run on an Arduino, ultimately improving efficiency and accuracy of the robot’s passing performance
* Won the 2019 Intercollegiate Robotic Football Championship

Mathematics Tutor, Brasher Falls, NY & Notre Dame, IN June 2016 – Present

* Orchestrate one-on-one tutoring sessions in the subjects of Algebra and Calculus
* Create lesson plans specific to each student’s needs and work directly with students to maximize understanding of the given course material

Matriculate Advising Fellow, Notre Dame, IN January 2019 – May 2020

* Advised high-achieving, low-income high school students through the college admissions, scholarship applications, and enrollment processes

**PROJECTS**

Minorities in the Private Sector Website, Notre Dame, IN November 2020 – December 2020

* Collaborated with a fellow student to develop a CherryPy server, Python data library and API, and JavaScript and HTML website that allows users to easily view and interpret statistics regarding the employment rates of women and minorities in the private sector.

HTTP Networking Project, Notre Dame, IN April 2020

* Collaborated with a partner to create an HTTP web server in C capable of handling directory listing, file, and CGI requests
* Designed a Python script to generate concurrent HTTP requests to analyze the network’s latency and throughput

MATLAB Pathfinder Project, Notre Dame, IN February 2019 – May 2019

* Utilized MATLAB to create a program capable of receiving two input coordinates on a map of campus, using Dijkstra’s algorithm to find the shortest path along the sidewalks between them, and displaying an animated drawing of the path in a new window

Blind Assist Ultrasonic Ranging Project, Notre Dame, IN April 2019

* Designed, built, and programmed an embedded system run on an Arduino and capable of ultrasonically detecting obstructions in a path and alerting the user through audio or mechanical notifiers

**ACTIVITIES**

Society of Women Engineers (SWE) October 2018 – Present

Science and Engineering Scholars Mentor August 2019 – Present

Notre Dame Welcome Weekend Ambassador August 2019