Garrett Phillips

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PERSONAL STATEMENT

Utilize leadership, interpersonal, and communication skills to gain valuable technical and professional work experience through software-oriented problem-solving opportunities.

EDUCATION

Purdue University, West Lafayette, IN **Expected Graduation - December 2024**

- **GPA: 3.80** - Major GPA: 3.92
- Senior pursing **Bachelor of Science in Computer Engineering**.
- Achieved Semester Honors and Dean's List in 4 consecutive semesters.

WORK EXPERIENCE

Electrical and Computer Engineering Intern

Delta ModTech, Ramsey, MN **May 2022 - August 2022**

- Assembled mechanical and electrical components of a highly complex, $1,000,000 laser die-cutting system per customer requirements through effective communication and collaboration with engineers, technicians, and professional writing personnel.
- Tested functionality of product through PLC programming and troubleshot unexpected results to achieve a 99% functionality rating.
- Integrated a prototype sub-assembly, including creation and documentation of electrical schematics, into an established laser die-cutting system to decrease the error margin of the laser head during operation at high material speeds.
- Navigated a fast-paced and intimate work setting with a collaborative attitude.

Soccer Referee

Minnesota Youth Soccer Association, Minneapolis, MN **May 2015 - August 2021**

- Refereed recreational, competitive, and select soccer clubs in the Minneapolis district of male and female athletes, ages 8-19.
- Enforced rules, structure, and order in high-stress situations and maintained professionalism when engaging with coaches and players.

COURSEWORK

ECE 39595 - Object-Oriented Programming with C++ **Fall 2023**

Distinct applications of **classes**, **inheritance**, **polymorphism**, **memory allocation**, **exception handling**, **object construction and destruction**, and the Standard Template Library (**STL**) to create distinct solutions for real-world problems.

ECE 36200 - Microprocessor Systems and Interfacing **Fall 2023**

Introduction to computer instruction sets, assembly language programming, organization, and interfacing.

ECE 36800 - Data Structures and Algorithms in C **Spring 2023**

Unique implementations of **trees**, **stacks**, **graphs**, **linked-lists, sorting and hashing algorithms**, as well as various other structures and algorithms to solve complex, time-intense problems.

ECE 20875 - Python for Data Science **Spring 2023**

Researched built in Python functions and imports to explore optimized solutions to problems using Natural Language Processing (**NLP**), K-Nearest Neighbor (**KNN**), Multilayer Perceptron neural networks (**MLP**), **Matplotlib**, **NumPy**, and **Scikit-learn**.

ECE 26400 - Advanced C Programming **Fall 2022**

Completion of projects by breaking down assignments into quantifiable tasks. Final project: Huffman Coding file compression algorithm.

INVOLVEMENT

Peer Success Coach

Purdue University, Academic Success Center **August 2023 - Present**

- Provide undergraduate students an opportunity to meet one-on-one as they navigate the college environment and learn to succeed academically, socially, and personally.
- Assist students with time management skills, exploring career options, and connecting with campus resources and academic advisors.

Undergraduate Teaching Assistant - ECE 20875

Purdue University, Elmore Family School of Electrical and Computer Engineering **August 2023 – Present**

- Support students in creating and optimizing problem-solving approaches to real-world data science issues through the utilization of python.
- Lead discussions during scheduled office hours and demonstrate sample problems exploring pythons built in functions, imports, data visualization tools like **Matplotlib**, and practical applications of libraries like **NumPy** and **Scikit-learn**.

TECHNICAL SKILLS

C/C++, Python, OOP, Django Framework, Git, Large Data Analysis, HTML/CSS, SQLite, Excel, Visual Studio, Verilog, MATLAB