David H. Joy

865-456-7892 | DavidJoy022@gmail.com

Profile Statement

With proficiency in several programming languages, I am constantly seeking to expand my skills from classes and extracurriculars into industry experience.

Skills

Programming Languages/Software: Python, Java, C++, GitHub, Maple

Intrapersonal: Independence, Determination, Detail-Oriented

Education

Auburn University, Auburn, AL — May 2023

Bachelor of Software Engineering with a Minor in Physics

GPA: 4.00/4.00 | Dean's List - Fall 2019, Spring 2020

Oak Ridge High School, Oak Ridge, TN — May 2019

GPA: 4.64, Decile: Top 10% | National Merit Finalist

Relevant Coursework (*Fall 2020)

Computer Science: Data Structures and Algorithms | Software Construction | Principles of Programming Languages | Assembly Programming | Operating Systems* Modeling & Design* | Discrete Structures*

Mathematics: Calculus 1, 2, & 3 | Linear Algebra | Linear Differential Equations | Statistics*

Physics: Engineering Physics 1 & 2 | Intro to Quantum Physics and Relativity | Fundamentals of Engineering Mechanics | Intermediate Electricity & Magnetism*

Research Experience

Oak Ridge High School Research Thesis — July 2017-May 2019

- Created a linear algebra-based technique in Maple to speed up calculations of biokinetics
- Wrote research paper, gave oral and poster presentations at competitions
- Placed second in the Southern Appalachian Science and Engineering Fair, earning a place at the 2019 International Science and Engineering Fair (ISEF)

Experience

Tennessee Tutoring Corps — Summer 2020

- Tutored elementary and middle school students in math and English

AuburnHacks: Best Overall Hack — February 2020

- Worked in team of 4 to create fully functional website over 24 hours
- Worked on backend and client-server communication
- Used Python, Flask, MongoDB, and JavaScript

Eagle Scout: Troop 224, Oak Ridge, TN — January 2019

- Designed and lead construction of outdoor stairs at local church
- Fundraised through Thrivent and oversaw ~350 man-hours of work

Involvement

Association for Computing Machinery: Competitive Programming Team — August 2019-Present

- Solve data-processing problems under time and memory constraints
- Participate in International Collegiate Programming Competition

Association for Computing Machinery: AI Club — August 2019-Present

- Lead meetings on a rotating basis
- Work on extracurricular machine learning group projects