

<b>EDUCATION</b>	<b>UNIVERSITY OF NOTRE DAME</b> NOTRE DAME, IN Bachelor of Science in Computer Science GPA: 3.93 <i>Major GPA:</i> 4.0 Dean's List all semesters, VP of Tau Beta Pi Engineering Honor Society (2020 – 2021)	MAY 2021
<b>TECHNICAL SKILLS</b>	<b>STRONG BACKGROUND IN:</b> Python, C, SQL, HTML, JavaScript, C++ <b>SOME EXPERIENCE WITH:</b> Java, Express, Git, PHP, CSS, MATLAB, Verilog, shell scripting	
<b>INTERNSHIPS</b>	<b>SOFTWARE DEVELOPMENT INTERN</b> OPTUM <ul style="list-style-type: none"><li>Coded in Java and JavaScript to create an algorithm which matches students to a certain number of different career sessions with limited seats based on the students' preferences in order to help automate a nonprofit's process for preparing for one of their frequent events</li><li>Collaborated with four interns to implement the solution as a full stack web application hosted on Azure, communicating with the client weekly to get continuous feedback</li><li>Created the entire user guide for the application and taught the client how to use the application when delivering the product on site</li><li>The application is being used by the nonprofit for each of their Career Day events and resulted in saving the small staff 30+ hours of work yearly</li></ul> <b>DATA FORENSICS INTERN</b> ERNST & YOUNG <ul style="list-style-type: none"><li>Description coming soon</li></ul>	JUN – AUG 2019           JUL – AUG 2020
<b>PROJECTS</b>	<b>SOLO PROJECTS</b> <ul style="list-style-type: none"><li>Created a personal <u><a href="#">website</a></u>, written in HTML, JavaScript, and CSS, focused on producing a clean, intuitive interface which works fully on any screen size</li><li>Used C to implement 3 versions of an interactive Mandelbrot fractal visualizer to highlight the performance benefits of concurrency and load balancing</li><li>Created an imaginary pet adoption <u><a href="#">web application</a></u> using the Express framework, Pug, the Google Maps API, and two JSON files in the back end</li><li>Utilized Python to extract data on the gender breakdown of multiple majors at Notre Dame, visualized the data with a Jupyter Notebook, and analyzed the data to find the trend of the gender breakdown over time for computer science</li><li>Created a 3D fractal generator by writing a MEL script to be executed within Autodesk Maya which displays a GUI to let users create and interact with infinite different 3D fractal models</li><li>Utilized C++ and the "gfx" graphics library to recreate "Snake" and to implement invented "Avoid the Balls" where the user's cursor must evade balls of random sizes and velocities</li></ul> <b>GROUP PROJECTS</b> <ul style="list-style-type: none"><li>Created a web application, with separate User and Admin views, integrated with a MySQL database via PHP as a solution for a nonprofit organization's volunteer signups</li><li>Simulated a pharmacy with C++, utilizing arrays and queues to track pill type, quantity, and expiration</li><li>Created a C++ implementation of the Heavy-Hitter algorithm and used the implementation to analyze 3.5 million pieces of real-world data in under 20 seconds</li></ul>	
<b>EXPERIENCE</b>	<b>TEACHING ASSISTANT</b> UNIVERSITY OF NOTRE DAME <ul style="list-style-type: none"><li>TA for Fundamentals of Computing (FA19 and FA20) and Data Structures (SP20)</li><li>Work one-on-one with students to help them understand data structures and C++ concepts, clarify misconceptions, and effectively debug</li><li>Give the students constructive feedback to increase the accuracy and efficiency of their programs</li></ul>	AUG 2019 – PRESENT