Brandon Hulse

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EDUCATION

University of Notre Dame | Notre Dame, IN — May 2026
Bachelor of Science — *GPA: 3.8*
Major: Computer Science | Minor: Engineering Corporate Practice

WORK EXPERIENCE

Verizon | Basking Ridge, New Jersey — June 2024 – August 2024
Technology Strategy Intern

- Contributed to a project that implemented a business intelligence (BI) report tracking and governance system while cutting excess spending and computing overhead by streamlining enterprise-wide BI tool use from 28 tools to 3
- Designed a framework for creating migration recommendations, which included Python and Bash scripts for data pre-processing, SQL queries for pulling pertinent data, and a Gemini-based LLM for report type categorization
- Successfully made three migration recommendations using this framework, resulting in over $800k in annual savings

Bridge Marina | Highlands, New Jersey — May 2021 – August 2023
Dockhand

- Built strong customer service and communication skills by teaching customers boat maneuvering techniques, providing boating advice/tips, and selling boating club/rental packages to 100+ customers
- Trained four new employees in daily operations, safety, and general boat maneuvering by editing the company training handbook, providing live demonstrations, and communicating personal experiences
- Aided in restructuring the location's daily operations procedure by evaluating the benefits of time-consuming procedures as well as installing new storage and cleaning equipment that boosted worker efficiency

RELATED COURSEWORK OR PROJECTS

Operating Systems Principles| University of Notre Dame — August 2024 – December 2024

- Developed a multi-core processing queue shell utilizing low-level system calls as well as FIFO, Round Robin, and multi-level feedback queue scheduling policies to ensure accurate job scheduling and resource allocation
- Implemented job management commands for adding, scheduling, and monitoring processes across multiple cores

Systems Programming | University of Notre Dame — January 2024 – May 2024

- Acquired proficiency in navigating Unix file systems, managing processes, utilizing networking tools, and executing command-line utilities to manipulate files and explore system resources effectively.
- Developed Python scripts and C programs that interact with low-level system components, including memory management, file operations, and sockets, while integrating system calls and handling directory manipulation tasks
- Applied advanced debugging tools like GDB and Valgrind to troubleshoot, profile, and optimize code, while constructing software pipelines using regular expressions and shell commands to process large datasets efficiently.

Engineering Computing | University of Notre Dame — January 2023 – May 2023

- Created an application that analyzed statistical trends on over 1.2 million data points from every recorded NHL game
- Generated insights into the impact of changes in coaching, equipment, and rules on both league-wide and team-specific statistical trends in addition to providing interactive trend visualizations
- Utilized MATLAB AppDesigner to create a GUI for efficient navigation and seamless user input experience

Other Coursework: Discrete Mathematics, Data Structures, Theory of Computing, Intro to AI, Intro to Embedded Systems

LEADERSHIP AND ACTIVITIES

Men's Water Polo | Notre Dame, Indiana — August 2023 – Present

- Assisted in developing a high-intensity interval swim training schedule to prepare the team for tournament season

Captain, Varsity Swimming| Lincroft, New Jersey — September 2021 – May 2022

- Led a team of 53 to multiple regional titles and the state championship meet, created meet lineups optimized to play against the strengths/weaknesses of the opponent, and coached younger/less experienced swimmers

TECHNICAL SKILLS

Technical: Python, C/C++, SQL, Linux, Bourne shell/Bash scripting, Git, MATLAB, BigQuery, Excel