

Brayden L. Pettigrew

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EDUCATION

The Pennsylvania State University

Bachelor of Science in Computer Science (GPA: 3.88/4.00)

University Park, PA

August 2021 – May 2025

- **Relevant Courses:** Calculus and Vector Analysis, OOP with Web-Based Applications, Discrete Mathematics for Computer Science, Computer Organization and Design, Introduction to Systems Programming, Programming Language Concepts, Data Structures and Algorithms, Operating Systems (Relevant coursework GPA: 4.00/4.00)

PROJECTS

Multi-threaded Communication Channel Project

The Pennsylvania State University

February 2024 – March 2024

University Park, PA

- Developed a multi-threaded communication channel library in C, enabling inter-thread communication.
- Utilized mutexes and condition variables for thread synchronization, ensuring thread safety.

Memory Management Project

The Pennsylvania State University

January 2024 – February 2024

University Park, PA

- Implemented a custom memory management system in C, including memory allocation, reallocation, and free functionalities.
- Enhanced performance and organization with an embedded segregated linked list structure and footer optimizations.

Personal Portfolio Website

The Pennsylvania State University

November 2023 – Present

University Park, PA

- Developed a personal portfolio website with HTML, CSS, and JavaScript.

Mini CPU

The Pennsylvania State University

October 2023 – November 2023

University Park, PA

- Implemented a foundational data path architecture using Verilog, integrating pipelining for concurrent instruction execution.

Course Scheduler Project

The Pennsylvania State University

April 2023 – May 2023

University Park, PA

- Created a course scheduler application with a GUI, including both user and admin functionality.
- Developed with Apache Derby Database, SQL, and Java Swing.

WORK EXPERIENCE

Server/Host

Wild Ginger III

September 2018 – August 2023

New Hope, PA

- Multitasked effectively by managing several customers in a fast-paced environment, creating a seamless dining experience.
- Collaborated productively with other restaurant staff, leading to a high level of service and guest satisfaction.
- Spearheaded the training of new staff.

EXTRACURRICULARS

Google Developers Student Club

The Pennsylvania State University

August 2023 – December 2023

University Park, PA

- Participated in a community dedicated to exploring various software and building solutions in a learning environment.

Sigma Chi Fraternity Head Risk Manager

The Pennsylvania State University

August 2022 – December 2022

State College, PA

- Organized a team to oversee the safety and execution of fraternity events, effectively reducing potential issues and danger.

HONORS/AWARDS

- Summa Cum Laude, Central Bucks East High School, May 2021 (GPA: 4.00/4.00)
- President's Education Award: Outstanding Academic Excellence, May 2021
- The Pennsylvania State Provost Award

TECHNICAL SKILLS

Languages: Python, Java, SQL, C, Verilog, JavaScript, HTML, CSS

Libraries/Frameworks: jQuery, Git, AWS