

William Phan

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EDUCATION

Virginia Polytechnic Institute and State University

Expected Graduation: May 2023

B.S. Computer Science | College of Engineering

GPA: 3.34/4.00

Relevant Coursework: Software Design & Data Structures, Data Structures & Algorithms, Intro to Computer Organization I & II, Intro to Problem Solving, Intro to Human Computer Interaction, Computer Systems, Intermediate Software Design

PROFESSIONAL EXPERIENCE

Fairfax County Public School

Falls Church, VA

Student Information Technology Technician

Sep 2019 - Jun 2020

- Streamlined spreadsheet reports on Excel to organize and create day to day management schedules of 20+ coworkers
- Managed and organized technical aspects such as sound check and presentations and for large events, meetings, and plays of 50+ people

Luther Jackson Middle School

Falls Church, VA

Summer Camp Instructor & Counselor

Aug 2014 - Aug 2019

- Collaborated with teams of 5+ to organize and manage groups of 15 - 30 children during team bonding activities
- Implemented weekly planned tasks and activities using Excel and instruction presentations using Powerpoint to lead group activities

PROJECTS/AWARDS

Women In STEM – Python, HTML, & CSS Visual Studio Code

- Best UI/UX design at Hacks of Kindness in October 2020
- Created an interactive website showcasing the many accomplishments of women in STEM
- Worked in an agile environment where my partners and I used Kanban to organize requirements and GIT

Geographic Information System (GIS) – Java Visual Studio Code

- Created a system to parse GIS text files into 3 structures: *PR Quadtree* to handle indexing by location (coordinates), *Hash Table* to index by feature name, and a *Buffer Pool* holding up to 15 entries called by the user.
- Could be used to find locations based on the name, or longitude and latitude coordinates (DMS)

ChessTree – Java Visual Studio Code

- Implemented a *decision tree* using *recursion* to find the optimal number of moves towards a winning board.
- Developed a program handling three commands, *depth first search*, *breadth first search*, and *print tree*.

Space Colonies – Java Eclipse

- Developed a program to sort a *deque* of people onto specific planets which met their requirements
- Implemented test driven development by creating unit test cases to fulfillment requirements

Created my own Binary Tree, Double Linked List, Linked List, PR Quadtree, Queue, Skip List, Stack Class – Java

Created my own ArrayList, HashTable, MIPS32 Assembler – C

SKILLS AND PROFICIENCIES

Programming Languages

- Java (Swing), Python, MATLAB, HTML, CSS, Bash, C, Assembly in MIPS, x86, MySQL, R

Development Tools

- Windows, Eclipse, MS Office (Word, PowerPoint, Excel, and Outlook), Rhapsody, Android Studio, Visual Studio Code, Postman, Git, IntelliJ