

# Callahan Tipton

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## EXPERIENCE

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### Physics Researcher

Wittenberg University Physics Department

May 2024 – Aug. 2024, Wittenberg University

- Developed software to track and analyze particle movement in a dusty plasma experiment
- Collaborated with graduate students and faculty
- Documented code and findings in a comprehensive, accessible format

### Teacher's Assistant

Computer Science

Jan. 2022 - Dec. 2024, Wittenberg University

- Assisted professors with classroom instruction and assignments
- Fostered a supportive learning environment by addressing questions and encouraging collaboration
- Provided individualized guidance to students

### Tutor

Math Workshop

Jan. 2022 - Dec. 2024, Wittenberg University

- Provided further individualized instruction for computer science assignments and concepts
- Assisted students in understanding the concepts introduced in computer science and math courses

### OWjL Camp Counselor

Ohio Wesleyan University

Jun. 2023, Delaware, OH

- Managed and guided a group of gifted middle-school students as they participated in camp activities daily
- Constantly communicated with other camp counselors and worked additional jobs to ensure the success of the camp
- Worked in the camp's central office to keep documents organized and to deliver packages around the campus

### Construction Worker

Winchester Construction Services

May 2020 – Aug. 2022, Canal Winchester, OH

- Worked on residential and commercial job sites
- Assisted in the sheet metal fabrication shop
- Operated company vehicles to transport material between the shop and job sites

## EDUCATION

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### Computer Science and Mathematics

Wittenberg University • Springfield, OH

- GPA: 3.85
- Graduation date: December 2024
- Wittenberg University Departmental Honors in Math and Computer Science

## COURSEWORK

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### First Year Research Award

Wittenberg University • Researching, Python, PyTorch, GitHub

- Researched early forms of neural networks (LeNet5, Alexnet)
- Used Python and the PyTorch framework
- Used GitHub to share code

### Principles of Computer Organization

Wittenberg University • Computer architecture, machine code, assembly, C

- Learned about how computers work at the hardware level and learned to use assembly language, machine code, and C

## Computer Programming II

Wittenberg University • Java, object-oriented Programming, data structures

- Practiced the Java programming language, basics of object-oriented programming, and learned about data structures

## Algorithms

Wittenberg University • Data structures, common algorithms, time complexity of algorithms

- Learned about common data structures (stacks, queues, hash tables, etc.)
  - Learned about common algorithms (unions, sorting, etc.)
  - Practiced finding time complexity of algorithms
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## INVOLVEMENT

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### Chapter President

Wittenberg University • Beta Theta Pi Fraternity • November 2023 - November 2024

- Ensured the success of the chapter's officers by frequently meeting with them, setting goals, and providing feedback
- Kept the chapter's affairs in order through constant communication with the general fraternity, Wittenberg University, and the chapter's local alumni association
- Guided the path of the chapter by setting goals, implementing new processes to achieve those goals, and keeping the chapter's morale high

### Vice President of Brotherhood

Wittenberg University • Beta Theta Pi Fraternity • November 2022 - November 2023

- Scheduled, planned, and setup brotherhood events for the chapter while staying within the budget
- Kept the chapter running smoothly by meeting with brothers who needed academic or personal assistance and settling matters between brothers
- Managed a small group designed to hold the members of the chapter accountable and to uphold the core values of the fraternity via facilitating weekly meetings

### Vice President

Wittenberg University • Wittenberg Computer Science Club • November 2022 - December 2024

- Assisted with operational aspects of the club such as planning trips to conferences, transportation and participation in programming competitions, and hosting a campus-wide programming competition
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## SKILLS

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Python, Java, C, Linux, HTML, CSS, Vim, Microsoft Office Applications

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## References

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