

# Michael C. Tripp

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## Education

### B.S. in Computer Science and Mathematics

New Wilmington, PA

WESTMINSTER COLLEGE

Aug 2019 – May 2023

- **Cumulative GPA:** 3.875 / 4.000
- **Relevant Coursework:** Advanced Data Structures, Computer Graphics, Language Design & Implementation, Machine Learning, Numerical Analysis, Database Design & Development, Calculus III, Discrete Mathematics

### CompTIA Security+ ce Certification

COMPTIA

Issued Aug 2022 · Expires Aug 2025

- **Relevant Concepts:** TCP/IP Protocols, SecDevOps (Waterfall Model, Agile Model), Network Security

## Work Experience

### Lead Desktop Support Student Tech

New Wilmington, PA

WESTMINSTER COLLEGE ITS DEPARTMENT

Feb 2020 – Present

- Promoted to Lead Student Tech in August 2021; supervise 6-8 Student Techs
- Plan and coordinate team member project activity
- Provide technical support for computer software or hardware related problems
- Monitor daily performance of computer systems on campus

### Computer Science and Mathematics Tutor

New Wilmington, PA

WESTMINSTER COLLEGE ACADEMIC SUCCESS CENTER

Aug 2021 – May 2022

- Led individual or small group instruction to improve academic performance
- Provided feedback to students using positive reinforcement techniques to encourage and build confidence in them

## Projects

### Bouncy Bouncy - Computer Graphics Project

C++, OpenGL

WESTMINSTER COLLEGE

Spring 2022

- Utilized the OpenGL API to develop a GUI application that displays a smaller object bouncing around an outer boundary, where both object and boundary are drawn by the user
- Implemented necessary mathematics so that object translates and rotates about its center according to angle of collision
- Incorporated additional keyboard input to modify speed and rotation of the object as it moves

### Wi-Fi Positioning Application - Senior Capstone

Python

WESTMINSTER COLLEGE

Sep 2022 - May 2023

- Researched the plausibility of implementing a Wi-Fi positioning system on Westminster College campus given technologies already available on campus
- Developed an application that attempts to approximate user device location on a map of Westminster College campus by scanning nearby Wi-Fi hotspots for signal strength data
- Employed Wi-Fi trilateration, the same underlying technique behind GPS, to approximate user location given these distances
- Provided potential revisions for future improved outcomes despite not achieving the desired accuracies in location estimation

## Skills

**Programming** C++, Python, Java, SQL, Ruby

**CS Concepts** Data Structures, Language Design, Database Design, Machine Learning

**Software & Tools** GitHub, VS Code, CodeBlocks, MySQL Workbench, LaTeX (Overleaf), Microsoft Office

**Project Management** Written and Oral Communication, Leadership, Teamwork, Troubleshooting, Documentation

## Personality

### Advocate

INFJ-A/MELANCHOLIC PHLEGMATIC/CS

- **Summary:** Loves helping others while also growing as a person, valuing cooperation, sensitivity, and independence
- **Strengths:** Creative, Insightful, Principled, Passionate, Altruistic
- **Weaknesses:** Perfectionistic, Overambitious, Sensitive to Criticism

References available upon request.