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Github - https://github.com/MaceTheWindu66
Portfolio Website- https://macethewindu66.github.io/website

Education

Worcester Polytechnic Institute *(August 2022 - May 2026)*
Bachelors of Science, Masters of Science
Major in Computer Science | Cumulative GPA: 3.1
Relevant Coursework: Software Engineering, Artificial Intelligence, Operating Systems, Algorithms, Computer Networks, Object Oriented Design, Network Security

Skills

- **Programming Languages:** Advanced proficiency in **Java, C, C++, x86 Assembly, Python, Java Script / Typescript, CSS, HTML**
- **Tools / Frameworks:** TensorFlow, PyTorch, Scikit-Learn, Pandas, React, Node.js, GitHub, Git, Docker, AWS
- **Mathematical Concepts**: Strong foundations in Discrete Mathematics, Algorithm Design
- **Operating Systems:** Linux (Advanced Systems Programming), Windows
- **Artificial Intelligence:** Machine Learning Algorithms, Deep Learning, Reinforcement Learning, Sentiment Analysis Models
- **Security:** Buffer Overflow, Return Oriented Programming, SQL Injection, Encryption
- **Full Stack Development:** Front-End Development (React), Back-End Development (Node.js)
- **Development Methodologies:** Agile Methodologies, Scrum, Daily Sprint Planning
- **Systems Programming:** Network/Socket Programming, Multithreaded / Thread-Safe development, Parallel Computing
- **Algorithms:** Sorting Algorithms, Graph Theory, Dynamic Programming, Greedy Algorithms, Optimization, Data Structures

Experience / Projects

- **Student Assistant / Peer Learning Assistant - WPI Computer Science Department** *(October 2024 - December 2024)*
  - Recommended and assigned to the course CS2011: Introduction to Machine Organization and Assembly Language
  - Held office hours to provide personalized assistance for over 100 students struggling with course topics (Common vulnerabilities and exploits, x86 Assembly, Memory Hierarchy)
  - Lead lab sections and facilitated a productive learning environment to practice skills learned in the course
- **Project Manager / Full Stack Developer - Mass General Hospital Kiosk** *(WPI Project)*
  - Led a cohesive team of 11 peers at WPI in a simulated workplace environment to ensure timely completion of milestones
  - Constructed an innovative kiosk platform featuring service-request and advanced pathfinding components
  - Applied agile methodologies, conducted sprint planning, and contributed over 75 hours to full stack development
- **Sentiment Analysis of Social Media posts using Artificial Intelligence** *(WPI Project)*
  - Collaborated with four classmates at WPI in a cohesive effort to implement 5 different Artificial Intelligence models used to detect sentiments in social media posts, such as posts on X.
- **Bomb-Lab and Attack-Lab Projects** *(WPI Project)*
  - Analyzed and solved Bomb-lab and Attack-lab assignments, gaining hands-on experience with **x86 Assembly Language**
  - Identified vulnerabilities in code, enhancing understanding of exploit techniques such as ROP and Buffer Overflow attacks
  - Gained valuable insight into exploit mitigation techniques and system-level security techniques
- **Personal Portfolio Website**
  - Developed a personal portfolio website using React, TypeScript, CSS, and HTML that showcases completed projects in Computer Science, personal interests, and additional hobbies
- **Deep-Learning Snake Model**
  - Developed a DeepQ Learning Model that autonomously masters the classic game of Snake, achieving proficient gameplay within 100 iterations