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Zachary J. Nawrocki

Personal Website: cutt.ly/zack GitHub: @zacknawrocki



Objective:

To obtain a summer internship in the field of computer science.

Education:

Rensselaer Polytechnic Institute (RPI), Troy, NY

May 2021

Cell: (774) 766-1119

Bachelor of Science in Computer Science, Concentration in Artificial Intelligence and Data Awarded the Rensselaer Medal Award and Scholarship

• The Medal was first presented in 1916 with two purposes: to recognize the superlative academic achievement of young men and women, and to motivate students toward careers in science, engineering, and technology. This merit scholarship, with a value of \$30,000 per year, is guaranteed yearly for Rensselaer Medalists at RPI.

RPI Computer Science Club, Member of Alpha Sigma Phi (Head of Philanthropy/Webmaster/Academic Advisor)

Bishop Connolly High School, Fall River, MA

Ranked #5 in graduating class, 3.97 GPA, National Honor Society, Mu Alpha Theta Mathematical Society, Sociedad Honoraria Hispánica, Sports: Ice Hockey (4 years) and American Football (3 years)

Technical Qualifications:

Languages: C++, Python, Java, C, Assembly, Processing, JavaScript, PHP, CSS, HTML

Operating Systems: Windows, MacOS, Unix, Linux

Skills: Bash, Git, QA, ROS, Software Engineering, Web Development, Agile, Machine Learning

Professional Experience:

LESA ERC Software Development Researcher

January 2019 - Present

- Integrated occupant localization, optimized system controls, and implemented/evaluated an integrated system for collecting user preferences.
- Funded primarily by the National Science Foundation, the LESA Center is dedicated to developing autonomous intelligent systems to address modern challenges in the connected environment. This specific project involves the area of autonomous HVAC control for smart buildings.

Leidos Software Engineer Intern

Summer 2018

- Leidos Cyber, originally the commercial cyber security division of Lockheed Martin, was acquired by Capgemini while working here in the summer of 2018.
- Developed and tested for the Industrial Defender Automation System Manager (ASM) platform, a management platform that aggregates event and state data from industrial endpoints across all vendor systems in one location for a single, unified view of operations.
- Responsible for the development and implementation of a major new feature in ASM 7.1, where asset licenses are automatically classified before being configured on the ASM.
- Worked on the Software QA Engineering Team and tested versions of ASM, ASA, agents, network-based intrusion detection systems, and other components of the Industrial Defender ASM Solution.

Selected Projects:

HVAC/Lighting Preference System and Building Manager

Originally used for my academic research, this collection of projects, currently used to operate a Smart Conference Room, is used to track individuals in an open room, while trying to satisfy their temperature and lighting preferences, based on their location. Additionally, the pre-heating/pre-cooling algorithm and meeting scheduler allow the room to heat/cool to the ideal temperature of the attendees, at the last possible minute before meetings, in order to save energy when meetings are not in session. Currently, my university is interested in implementing this algorithm/technology across campus to save RPI a fortune in heating, ventilation, and air conditioning.

Open IO

An open-source, real-time multiplayer game engine solution, intended for the development of IO games.

Other projects can be found on my personal website, GitHub, and LinkedIn.

Relevant Coursework:

Open Source Software, Network Programming, Computational Biology, Operating Systems, Introduction to Artificial Intelligence, Software Design and Documentation, Smart HVAC Control Using IoT, Principles of Software, Introduction to Algorithms, Computer Organization, Foundations of Computer Science, Data Structures, Computer Science I, Differential Equations, Multivariable Calculus and Matrix Algebra, Calculus II, and Calculus I