

EDUCATION

Syracuse University, School of Engineering and Computer Science

Syracuse, NY

Bachelor of Science in Computer Science

Anticipated Graduation Date: **May 2025**

Relevant Coursework: Algorithms Analysis and Design, Minds and Machines, Design Operating Systems

GPA: 3.60/4.0

SKILLS:

Languages: C, C++, Python, HTML, x86 Assembly, data structures, algorithms, Unix/Linux

Hardware and Applications: logic gate design, network protocols, operating systems, VSCode, Excel, Matlab

RESEARCH EXPERIENCE

Undergraduate Research Assistant

Nov 2023 - Present

Syracuse University Electrical Engineering and Computer Science REU

Syracuse, NY

- Contributing to research with Professor Endadul Hoque by addressing security challenges in automation apps on IoT platforms. Our work implements Maverick, which tackles a more realistic threat model compared to existing models that focus on simpler threat models. This run-time mechanism uses an approach to enforce policies against cyber actions, including third-party services.
- Responsible for manually testing and refining the LLM's capabilities on a dataset containing over 280 policies. This involved categorizing, training, and teaching the machine how to translate natural language to policy language by providing various examples
- Collaborating with a group of master's and Ph.D. students to analyze research findings with a focus on potential applications for real-world IoT translations in smart devices at home such as Alexa.

Undergraduate Researcher

Jun - Aug 2022

Indiana University Purdue University Indianapolis (IUPUI) NSF REU

Indianapolis, IN

- Conducted undergraduate research in Enhancing Undergraduate Experience in Mobile Cloud and Data Security with a focus on cybersecurity and autonomous vehicles
- Specialized in attribute-based access control including Cryptographic ABAC, Attribute-Based Hierarchical Access Control, Ciphertext-Policy, Attribute-Based Encryption (AHAC-CP-ABE), and Ciphertext-Policy Attribute- Based Encryption that offers overall support for dynamic authorization and real-time attribute credentials, Diffie-Hellman, and Man in the Middle Attack
- Surveyed three Cryptographic Attribute-Based Access Control Systems by reviewing relevant research papers. Authored a research paper along with my peer explaining their methodologies, conducting a comprehensive analysis, and proposing a system that incorporates the strengths of each, which resulted in enhanced efficiency and optimization

EXPERIENCE

Academic Excellence Workshop Facilitator

Sep 2023 – Present

Syracuse University, School of Engineering and Computer Science

Syracuse, NY

- Facilitate and manage the group dynamic of a weekly small group workshop of 10 participants in Calculus I, II, and pre-calculus
- Coach participants to focus on calculus mastery, guide participants in the right direction through use of open-ended questions and prepare course materials ahead of the session held twice a week to reinforce class topics

Team Leader and On-Site Trainer

Jun – Aug 2023

Camp Galileo

Cupertino, CA

- Led a team where I was responsible for the well-being of over 30 children aged 5-8. Ensured the physical and emotional needs of each child were met, including bathroom breaks, sun protection, and emotional needs.
- Selected as an On-site Trainer due to exemplary leadership skills and gained the trust of the Camp Director.

- Provided comprehensive training to over 10 new employees (ages 16-22), addressing queries and ensuring a smooth onboarding process.
- Collaborated with the Camp Director and Assistant Camp Director in planning and executing camp events.
- Demonstrated versatility by actively contributing to tasks beyond the assigned role, ensuring the success of various camp activities.

Systems Engineer Intern

Dec 2019 – May 2022

Rheonix Inc.

Ithaca, NY

- Perform statistical data analysis for COVID-19 test reports to generate throughput of automated molecular testing platforms
- Create a structured monthly performance evaluation tracking method for use at multiple hospital sites for improved failure rate & root cause analysis tracking purposes

RELEVANT PROJECTS

Team Leader [Group Project, CIS453 Software Specification and Design]

Sep 2023 – Present

Syracuse University, School of Engineering and Computer Science

Cupertino, CA

- Led a team of four in the design and specification of a Food Pantry System app.
- Organize and conduct weekly meetings, including the documentations of decisions through meeting notes.
- Utilize Jira for comprehensive task management, setting deadlines for both individual and group assignments related to the project.
- Regularly check in with team members to monitor progress, address challenges, and provide necessary support.
- Applied program management skills, including task delegation, progress monitoring, and effective communication within the team and the Professor.

Hackathon Project

Feb 2022

SyracuseSafeZone

Syracuse, NY

- Developed a website with a team of three using the Syracuse OpenData API to access crime rate and police data of the Syracuse area to generate a map
 - Coded the project in python and integrated python libraries including folium, json, and pandas, [github link to project](#)
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