Samhitha Duggirala

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SUMMARY

High-achieving undergraduate student with a specialization in information systems and information security and past work in analyzing and applying cyber security principles. Experienced in working with various coding languages such as Python and Java, delivering projects in limited time environments, and collaborating with diverse groups in implementing ML, Computer Science, and Cyber Security-based projects.

SKILLS

Computing Skills: Python, Java, JavaScript, Powershell Script, Batch Script, Beginner C, Microsoft Suite, Beginner MySQL
Cyber Security Skills: Beginner Malware Analysis, Evaluating System Security, Network Security

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EDUCATION

Carnegie Mellon University   **CLASS OF 2027**
B.S. Information Systems, Minor in Information Security,
GPA: 4.0/4.0
- **Relevant Coursework:** Principle of Imperative Computation, Information System Milieux, Fundamentals of Programming and Computer Science

MIT Beaver Works Summer Institute - Advanced Cyber Operations   **2022**
- Led peers and juniors in coordinating the classes, capstone projects, and community as Class Leader and Honor Graduate during and after the Advanced Cyber Ops Course
- Acquired late undergraduate to early graduate level skills in analyzing malware and methods to mitigate or prevent attacks on computer systems
- Performed analysis on an infected system's logs, email data, file history, and packet capture data in conjunction with investigating open-source intelligence to identify sources of a malware attack

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CERTIFICATIONS

ISC2 Certified in CyberSecurity - ISC2   **February 2024**

EXPERIENCE

Computer Science Department (CMU) - *Teaching Assistant*   **January 2024-PRESENT**
- Teaching Assistant for 15-112: Fundamentals of Programming and Computer Science, a core course about fundamental knowledge in coding and CS using Python
- Lead weekly recitation sessions, teaching computer science principles and solving complex problems live in a classroom setting to a group of 20+ students.
- Create a stress-free environment where students are encouraged to voice concerns, responding with extensive explanations and examples to each mastery of materials.
- Hold mentorship responsibilities while teaching struggling students through 1-on-1 tutoring

NASA SEES Earth Explorers - *Student Intern*   **2022-2023**
- Created a Logistic Regression Machine Learning Model, collaborating with a team, to identify and map specific types of mosquitoes in disease mitigation efforts
- Selected to present research among about 100 other students at the AGU Bright STaRS fall meeting to spread the study of technology in Earth science
- Compiled land cover and mosquito data centered in San Diego County in assisting global mosquito and land research through citizen science

KUMON of 4S Ranch - *Tutor*   **2022-2023**
- Guided young students ages 3-7 in language skills like reading, writing, and pronunciation along with basic math skills to initiate their educational journey
- Aided middle through high school students in preparing for level math concepts above their grade levels, such as algebra, trigonometry, and calculus

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ACTIVITIES

CyberAegis Team - *Lead*   **2017-2023**
- Formulated training material to teach intermediate-level cybersecurity to a class of over 120 middle and high school students to develop and prime their skills
- Engaged in investigating security vulnerabilities and implementing secure practices on Windows, Linux and network devices in addition to configuring basic level DNS servers, FTP servers, and SQL databases.
- Collaborated within a team yearly in the nationwide CyberPatriot competition, reaching the National Finals twice
- Competed in additional cybersecurity and digital forensics competitions like the CalPoly Space Grand Challenge and the SoCal Cyber Cup Challenge.