Mohd Tanjim Hasan

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EDUCATION

University of Georgia | PhD Student, Computer Science   Expected May 2025
- GPA: 4.0/4.0
- Relevant courses: IoT Security, Human-Computer Interaction, Computer Vision, Secure Programming

University of Georgia | Masters of Science, Computer Science   May 2021
- GPA: 3.75/4.0
- Relevant courses: Algorithms, Cyber Forensics, Differential Privacy, Computer Graphics

University of Georgia | Bachelors of Science, Computer Science   May 2020
- GPA: 3.56/4.0
- Relevant courses: Web Development, Computer Architecture, Data Structures, Software Development
- Awards: Outstanding Undergraduate Student Award (Spring 2020), Dean's List (Fall 2018, Spring 2020)

SKILLS

Programming: Python, C++, Java, C#, HTML/CSS, SQL
Tools: NrfUtil, Intel PIN Tool, Git, Unity, Unix,

PROFESSIONAL EXPERIENCE

Research Assistant - University of Georgia | Athens, GA   Aug 2020 - Present
- Working with a team of professors and Ph.D students to discover and analyze privacy issues in modern IoT devices.
- Facilitate weekly meetings to analyze newly released IoT research papers and plan experiments to further findings.
- Execute experiments and organize, analyze, and present data to the team for peer review and further experimentation.

Global Cyber Security Intern - Equifax | Atlanta, GA   May 2019 - Aug 2019
- Created Python script to automate information gathering process for internal audits.
- Decreased backlog of incomplete security vulnerability updates by 34% after implementation.

Computer Science Teaching Assistant - University of Georgia | Athens, GA   Aug 2018 - May 2020
- Held labs and office hours to teach 250+ students how to apply programming techniques such as recursion, overloading, and time efficiency to complex problems.

LEADERSHIP EXPERIENCE

UGAHacks| Athens, GA

Advisor - UGAHacks 6   Feb 2020 - Present
- Provide support and direction for the current administration of UGAHacks.
- Work to keep our previous sponsors for future events.
- Assist in establishing and garnering relationships with potential sponsors, mentors, and resources to help the organization continue growing.

Lead Director & CEO **-** UGAHacks 5   Feb 2019 - Feb 2020
- Managed and coordinated a group of 35 members, including 6 directors split among five teams: Marketing, Logistics, Web Development, and Sponsorship.
- Increased attendance by 34%, budget size by 73%, and submitted projects by 32%
- Established UGAHacks as a non-profit organization.

Logistics Director - UGAHacks 4   Nov 2018 - Feb 2019
- Responsible for creating and making sure the schedule was followed by attendees and workshop leaders.
- Coordinated with 9 mentors and 37 sponsors to ensure everyone knew where events would be held and at what times.

PROJECTS

Firmware Update Attack - Project Leader   Oct 2020 - Present
- Creating and analyzing firmware update attacks on Nordic Semiconductor's System on Chip devices.
- Created a Python script to automatically analyze a database of over 16 million APKs to assess the extent of the discovered vulnerability in modern devices.
- Currently working on a research paper for publication in top-tier conferences.

Buffer Overflow Detection Tool - Developer   Feb 2021
- Built detection program using Intel PIN tool and C++ that analyzes machine code to detect and stop buffer overflow attacks by tainting and keeping track of tainted byte addresses.
- Program injects function calls before each machine code instruction and runs various checks during runtime to prevent intentional overflow attacks.
- 100% detection rate and .002% false alarm rate.

UGAHacks Website - Backend Developer   Feb 2019
- Utilized PostGreSQL to maintain and update a 1000+ entry database.
- Handled Django Migrations issues and created Crontab scripts to backup server and database data.