Ayushi Rathore

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To seek internship/co-op or full-time opportunities starting spring/summer, 2020 in the field of cybersecurity

Employment History

Rochester Institute of Technology

Graduate Assistant
Working on security of self-driving car.
August 2019-Present

Department of Computer Science Engineering, Aligarh Muslim University

Research Project Intern June 2016 – August 2016

Member RIT Security Club

August 2018- Present

Education

Rochester Institute of Technology

MS in Computing Security Expected Graduation: May 2020 Cum. GPA: 3.86/4.0

JSS Academy of Technical Education

Bachelor of Technology in Computer Science Graduated: May 2017

Aligarh Muslim University

Diploma in Information Technology Graduated: May 2014

Graduate Coursework

Cryptography and Authentication, Penetration Testing, Computer Viruses and Malware, Computer Forensics, Network Security, Computer System Security, Trusted Security and Trusted Execution, Wireless Security, Automotive security

Publications

"Effective Greenhouse Monitoring and Controlling using Recurrent Fuzzy Neural Network",6th International Conference on Advanced Computing, Engineering and Technology, 2017

"Efficient Parking Management Using the IoT Technology", International Journal of Computer Sciences and Engineering, Vol.5, Issue.9, pp.208-212, 2017.

License

C|EH V10

Projects

Security of Autopilot Car: Looking for security problems in the perception module of autonomous car. This study is being performed on Apollo Auto an opensource platform for autopilot car.

Blockchain: Consensus Protocols, Attacks and Mitigation: In this project we have studied various consensus protocol. Researching PoS deeply studied attacks on it and provided solution to coinage accumulation, precomputing and long-range attack.

Alert System for Smart Home using SDR: In this project, vulnerable devices in the smart home network are identified and an alert is sent to the user of those devices.

Greenhouse Monitoring and Controlling System using the IoT Technology: The system uses various sensors and monitor the greenhouse environment and notifies the concerned authority about the critical conditions of greenhouse.

Efficient Parking Management using the IoT Technology: The system uses android/web app to find the nearby vacant parking spaces.

Clever Bin a smart system designed using IoT Technology to locate the nearby dustbin to user and also update the concerned authority about the filled status of the dustbin.

Personal Website

Professional Skills

Security: Malware Analysis, Reverse Engineering, Penetration Testing, Firewall, IDS/IPS, ACLs, OWASP, Network Security, Cryptography algorithm, Hashing algorithms, Digital Certificates, SSL/TLS, Buffer Overflow.

Languages: C/C++, Python, MySQL, HTML & CSS, C-Graphics.

Tools: Elastic Stack, Nmap, Metasploit, Burp proxy, Nessus, netcat, OWASP Zap, PowerShell Empire, Wireshark, Ettercap, Yersinia, Snort, IDA pro, OllyDbg.

Development: Android App, Web App.

Technologies: IoT, Blockchain. **Others:** MS Office, Joomla.

Activities

Participated in Red-Blue Teaming events, CTFs, Attended Security Conferences