Maggie Gates

MS Student, University of Virginia
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Work Experience:

Intern **March 2019 – Present**
Randori

Currently working remotely part time doing research on vulnerabilities. During the summer of 2019, developed a tool in python to assist in the vulnerability research.

Research Assistant **September 2018 - December 2018**
University of Virginia

Developed an SSH Man in the Middle exercise to be used in a Network Security class. This included developing an environment, predicting problems and providing suggestions for fixing them, creating a step by step guide to complete the exercise and explaining the components in an easy to understand way.

Intern Experience Coordinator **May 2018 – October 2019**
Novetta Solutions

Managed and organized events for all Novetta interns. Collected feedback on the interns and the program itself. Helped to create a more formal intern program at Novetta. This job required me to be able to effectively communicate needs between management and the interns, keep organized and on top of all deadlines, and check in with each intern to ensure they were having the best internship they could.

Software Engineer **May 2017 – August 2018**
Novetta Solutions

Worked with the Special Projects group on integrating Raspberry Pi's and various sensors in to the AWS software including AWS IoT, Kibana, ElasticSearch, EC2, DynamoDB. Currently working on an autonomous visual homing drone using AWS and Alexa. The main language for these projects is python.

Teaching Assistant **January 2017 - May 2017**
University of Virginia

Assisted with an upper level project based Computer Science class. Worked with the professor and graduate TA to ensure the students in the class meet deadlines, answer questions and help with problem solving, as well as assisted in grading assignments. I also led the effort to migrate their course projects off local UVA servers to an AWS server.

Robotics and Computer Vision Undergraduate Researcher **August 2016 – May 2017**
Fordham University

Project lead for research, titled "Personal Space", that involved using panoramic video and sonar sensors in order to improve Robots' perception of their environment. Previous research includes contributions to a project titled "Getting it right the first time: Establishing performance guarantees for Counter Weapons of Mass Destruction autonomous robot missions" conducted for the Defense Threat Reduction Agency. In both of these projects I produced and debugged code, ensured weekly goals were met, communicated effectively with co-researchers and Director of the Lab, produced documentation, and replicated experiments in order to check results. The main language for these projects was C++ with the Aria and OpenCV library.

Robotics and Computer Vision Lab Technician **January 2016 – May 2017**
Fordham University

Created a battery booster pack that allows higher voltage batteries to be attached to a robot during testing solving a common problem with the model used in our and other labs. Other day to day tasks included managing the in lab network, inventorying equipment, conducting weekly testing and updating of robots and computers, as well as adjusting or producing any hardware needs.

Education:

University of Virginia – School of Engineering **Expected Graduation: May 2020**

MS - Computer Science

Advisor: Dr. Nicola Bezzo, Autonomous Mobile Robots Lab

Thesis Topic: Mobile Autonomous Robot Swarm Security - Defense mechanisms for swarms suffering sensor spoofing and/or communication based attacks.

University of Virginia – College of Arts and Sciences **Graduation: May 2019**

BA - Computer Science, GPA: 3.5

National Outdoor Leadership School **June 2016 – July 2016**

7-week rock climbing and backpacking course in the Wind River Range of the Rocky Mountains, skills learned include navigation, survival, climbing, and leadership skills.

Code Path **January 2016 – May 2016**

12-week course on iOS app development, received a passing grade on a pass/fail grading scheme. Comfortable with XCode and the Swift language.

Practical IoT Hacking: Basic Edition **Blackhat – August 2018**

Certificate of Completion awarded.

Soft Skills: Fast learner – Effective communicator – Hard worker – Organized – Adaptable – Self-Reliant.

Hard Skills:

Languages: Python – Preferred, C++, MATLAB, LaTeX, Conversational French
Operating Systems: OSX – Preferred, Linux – Preferred, VMWare, Microsoft
Infosec Tools: Wireshark, Burp, Metasploit, John, Nmap, Netcat, OpenSSH, Tmux

Awards: University of Virginia College of Arts and Sciences Deans List
2x Facebook - WiCyS scholarship to attend the Women in Cyber Security conference
Facebook scholarship to attend USENIX Enigma Conference

Volunteer Work:

DEF Con Goon **2017/2018**

Worked in the inhuman registration division at DEF CON 25 and will be returning for future Cons. In order to be of most help I had to be self-reliant and flexible filling roles as needed, I organized registration forms and packets, registered human and non-human attendees, directed people within the con, and stepped in to various other roles as assistance was needed.

Novetta Recruiting Table at the below conferences:

Shmoocon
DerbyCon
BSides NOVA

Leadership:

2019 Collegiate Penetration Testing Competition Team Captain - Northeast Region 1st Place
2020 International Security Talent Search Competion Team Captain - 2nd Place
2020 Collegiate Cyber Defense Competition Team Captain - TBD