MELISA SAVICH

ACTIVE SECURITY CLEARANCE

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EDUCATION

New York University
M.S. Computer Science 2020
Cumulative GPA: 3.9

University of Michigan
B.S. Women's Studies 2018
B.S. Computer Science 2018

RELEVANT COURSEWORK

Master's Coursework
Design and Analysis of Algorithms I • Computer Architecture I • Information Visualization • Penetration Testing and Vulnerability Analysis • Artificial Intelligence I • Computer Networking • Introduction to Offensive Security • Distributed Systems

Undergraduate Coursework
Data Structures and Algorithms • Introduction to Computer Organization • Foundations of Computer Science • Introduction to Computer Security • Computing for Computer Scientists • Mobile App Development for Entrepreneurs • Introduction to Cryptography • Introduction to Operating Systems • Database Management Systems

EMPLOYMENT

CRITICAL SKILLS MASTER'S PROGRAM FELLOW
Sandia National Laboratories — Albuquerque, NM — June 2018 to Current

- An employee of the Experimental Cyber Initiatives department which is responsible for advancing R&D in the area of cyber modeling and simulation with applications in areas including high-consequence networks, high-value networks, embedded systems, and control systems.
- Created a framework within our comprehensive in-house ICS/SCADA modeling and simulation platform that supported generic DAQ capability (i.e. HITL).

RESEARCH & DEVELOPMENT INTERN
Sandia National Laboratories — Albuquerque, NM — May 2017 to May 2018

- Integrated minimega's protonuke into our in-house orchestration tool used for managing the creation, configuration, and deployment of modeling and simulation environments.
- Developed an experimental cyber range, with a lead on the creation of honeypots within that cyber range.
- Created a drone simulation program that integrated features of cyber disruption.
- Upgraded our automated ELK dashboard deployment and monitoring within our comprehensive in-house ICS/SCADA modeling and simulation platform which is responsible for capturing the cyber/physical impacts of targeted cyber events on critical infrastructure and control systems.

INSTRUCTIONAL AIDE FOR INTRODUCTION TO COMPUTER SECURITY
University of Michigan's Computer Science Department — Ann Arbor, MI — Sept. 2017 to Apr. 2018

- Held a weekly two-hour discussion section in addition to office hours.
- Answered curriculum-related questions on Piazza.
- Assisted in curriculum/project development.
- Head of Exam Logistics: Coordinated writing and testing of the final exam for the class. Organized testing locations for 300+ students, as well as directed and informed other staff of their duties as exam overseers and graders.

INSTRUCTIONAL AIDE FOR PROGRAMMING AND INTRODUCTORY DATA STRUCTURES
University of Michigan's Computer Science Department — Ann Arbor, MI — Sept. 2016 to Apr. 2017

- Held a weekly two-hour discussion section in addition to office hours.
- Answered curriculum-related questions on Piazza.
- Assisted in curriculum/project development.
- Head of Cheat Checking: Utilized Stanford's MOSS (Measure of Software Similarity) to detect plagiarism in student projects. Wrote additional scripts and documentation to supplement MOSS's capabilities in order to suit the needs of a 950+ student class.
- Head of Exam Logistics: Coordinated writing and testing of midterm and final exams for the class. Organized testing locations for 950+ students, as well as directed and informed other staff of their duties as exam overseers and graders.

SKILLS

PROGRAMMING: CSS, Bash, C, C++, Git, Go, HTML, Java, Javascript, LaTeX, Oracle SQL, Python, SCADA Systems
LANGUAGES: English, Macedonian (bilingual), French (conversational)

AWARDS

RSAC SECURITY SCHOLAR · RSA Conference — Mar. 2019

STUDENT SCHOLARSHIP · Black Hat USA 2019 — Aug. 2019

PUBLIATIONS & WORKSHOPS

COMMPACT: EXPLORING THE FEASIBILITY OF AUTONOMOUS VEHICLE CONTRACTS
J. Erickson, M. Savich, S. Chen, M. Pese, S. Hu and Z. M. Mao
escar USA, June 2018

COMMPACT: EVALUATING THE FEASIBILITY OF AUTONOMOUS VEHICLE CONTRACTS
J. Erickson, S. Chen, M. Savich, S. Hu and Z. M. Mao
IEEE Vehicular Networking Conference (VNC), December 2018