MELISA SAVICH
ACTIVE SECURITY CLEARANCE

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EDUCATION

New York University
M.S. Computer Science 2020
Cumulative GPA: 4.00

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

RELEVANT COURSEWORK

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

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　　　　　　　　　　　　　　　　　　　　Albuquerque, NM
Sandia National Laboratories　　　　　　　　　　　　　　　　　　　　　　　　　　　　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　　　　　　　　　　　　　　　　　　　　　　　Albuquerque, NM
Sandia National Laboratories　　　　　　　　　　　　　　　　　　　　　　　　　　　　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　　　　　　　　　　Ann Arbor, MI
University of Michigan's Computer Science Department　　　　　　　　　　　　　　　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　　　　Ann Arbor, MI
University of Michigan's Computer Science Department　　　　　　　　　　　　　　　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.

GRADER FOR PROGRAMMING AND INTRODUCTORY DATA STRUCTURES　　　　　　　　　Ann Arbor, MI
University of Michigan's Computer Science Department　　　　　　　　　　　　　　　May 2016 to Aug. 2016
- Graded correctness in students' weekly lab work.
- Graded and gave feedback on students' coding style on course projects.
- Assisted in course improvement in regards to lab work.

RESEARCH ASSISTANT　　　　　　　　　　　　　　　　　　　　　　　　　　　　　Ann Arbor, MI
University of Michigan's Sociology Department　　　　　　　　　　　　　　　　　　　Jan. 2016 to Dec. 2016
- Middle School Sexuality: Subjective Understandings and Interactional Classroom Processes
- Researched the role of social media websites (blogs, forums, online communities) as a source of informal sex education for middle school adolescents.

COMPUTER OPERATOR　　　　　　　　　　　　　　　　　　　　　　　　　　　　Ann Arbor, MI
University of Michigan's Medical School Information Services　　　　　　　　　　　　Sept. 2015 to Aug. 2016

SKILLS

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

AWARDS

RSA CONFERENCE SECURITY SCHOLAR　　　　　　　　　　　　　　　　　　　　　　Mar. 2019

PUBLICATIONS

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

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