MELISA SAVICH
ACTIVE SECURITY CLEARANCE

✉ mksavic@nyu.edu
🌐 melisasavich.io
in melisasavich
⚙ m3lixir

EDUCATION

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

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 • 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 May 2020

- 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 exams 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 Exam Logistics: Coordinated writing and testing of 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.
- 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.

MELISA SAVICH
ACTIVE SECURITY CLEARANCE

EMPLOYMENT

GRADER FOR PROGRAMMING AND INTRODUCTORY DATA STRUCTURES
University of Michigan's Computer Science Department

Ann Arbor, MI
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
University of Michigan's Sociology Department

Ann Arbor, MI
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
University of Michigan's Medical School Information Services

Ann Arbor, MI
Sept. 2015 to Aug. 2016

PROJECTS

SHOWUP   Sept. 2019 to Dec. 2019

ShowUp is a Django-backed web application that assists you in finding others to attend concerts with. If you would like to review the source code/see a demo, please send me a request so I can grant you temporary access. Please review README.md for an overview of the features of this product.

This idea organically grew from my love for EDM (Electronic Dance Music) and everything that involves the scene. However, there has been a huge lack of applications allowing others with the same music interests to connect with each other over this shared love. An application such as ShowUp is especially necessary as those of us in the scene oftentimes travel across the country or even the world to see our favorite artists perform and connect with other humans who share the same love for the music. It is oftentimes the case that many of our "families" are not in physical proximity to each other and need a way to efficiently communicate and meet others with this passion. Hence, ShowUp was created.

This project was developed under Agile guidelines, with my role as Product Owner. The role of Scrum Master alternated between my teammates, Vedanth Dasari, Viktor Moros, Kavin Shah, and Jason Woo (listed alphabetically by last name).

SKILLS

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

AWARDS

RSA Conference · **RSAC SECURITY SCHOLAR**   Mar. 2019

Black Hat USA 2019 · **STUDENT SCHOLARSHIP**   Aug. 2019

PUBLICATIONS & WORKSHOPS

COMMPACT: EVALUATING THE FEASIBILITY OF AUTONOMOUS VEHICLE CONTRACTS   Dec. 2018

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   June 2018

J. Erickson, M. Savich, S. Chen, M. Pese, S. Hu and Z. M. Mao
escar USA, June 2018