Ashton Sopher

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RESEARCH

Radio Spectrum Characterization (WINLAB) [Summer 2019]
- Designed a system to collect spectrum usage from a wireless testbed
- Applied machine learning to predict future usage and to extrapolate network data

IoT Cybersecurity (WINLAB) [Summer 2018]
- Developed and executed several attacks against a Blue Team's Internet of Things system
- Worked with a team of 4 other students
- Successfully ran jamming and sniffing attacks

Automatic Zip Code Reader (Governor's School at Rutgers)
- Built a system to visually process handwritten digits through a webcam using computer vision in MATLAB
- Worked with a team of 4 other students
- Achieved a 40% accuracy rate

SKILLS & LANGUAGES

Proficient: Java, Python, Linux, R, HTML, CSS, Javascript
Some Experience: C, MATLAB, Ruby, MySQL

Fluent: English, French
Conversational: Spanish, Turkish, Esperanto

EDUCATION

UNIVERSITY OF ROCHESTER - ROCHESTER, NY
2017-2021
Major: Computer Science & Mathematics (BA)
3.42 GPA
Jesse L. Rosenberger Prize (2019)

RELEVANT COURSES

COMPUTER SCIENCE
Cryptography, Data Structures & Algorithms, Computer Architecture, Social Implications of Computing, Algorithms, Topics in Cryptography, Computational Statistics, Database Systems, Computer Security

MATHEMATICS
Multivariable Calculus, Discrete Math, Linear Algebra with Differential Equations, Linear Algebra, Number Theory, Abstract Algebra, Graph Theory, Topology, Real Analysis, Differential Geometry

EXTRACURRICULAR

Students for a Democratic Society - President (2019-2021)
Students for a Democratic Society - Treasurer (2018-2019)