

HENRY J. MENG

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EDUCATION

University of Michigan, College of Engineering Graduating May, 2022
Bachelor of Computer Science | GPA: 3.47/4.0 | Engineering Dean's List, Winter 2019

WORK EXPERIENCE

University of Michigan Academic Year 2018-19, Summer 2019-Present
Cybersecurity Researcher

- Conduct research with Prof. Alex Halderman on voting machine security penetration
- Develop software to monitor and alter voter records and attack polling place election day processes
- Design and oversee Institutional Review Board (IRB) approved studies with hundreds of human participants examining their scrutiny of voting while unknowingly using hacked machines

Ondine Biomedical Summer 2017, Summer 2018
Engineering and Programming Intern

- Engineered and programmed new manufacturing processes for key component of Sinuwave photo-disinfection device, reducing production cost by 80%
- Designed, CAD-modeled, and constructed lab equipment for antibiotic-resistant bacteria research

TECHNICAL SKILLS

Languages	Python, C++, Java, MATLAB, LaTeX
Software & Tools	Rhino CAD, Photoshop

EXTRACURRICULAR / ACHIEVEMENTS

- Demonstrated voting machine security flaws at the 2019 Election Verification Network conference in Washington, D.C.
- Captain of high school varsity robotics team: ranked 11th (2017) and 3rd (2018) in Washington State
- First-ever teaching assistant at high-school: taught makerspace and robotics classes
- Extracurricular interests include backpacking, snowboarding, and photography (film, digital and drone)

CURRENT PERSONAL PROJECTS - AVAILABLE ON GITHUB

- **MovieFinder** takes a list of movies and returns a list of users on LetterBoxd.com who like movies on the list and their favorite movies. Planned: k-means clustering algorithm to recommend movies to the user.
- **TwitterScraper** uses multi-threaded web-scraping to collect the tweets of a user past the 3200 tweet limit for users without developer API access to search.
- **MarkovGen** is a Markovian text generator with some special bells and whistles. For use in future personal projects.
- **Classic Games on Voting Machines**: Installed and played *Solitaire* on the *AVS WINVote* via Windows XP command prompt security flaw. *Tetris & Pong* on a *Dominion Imagecast Precinct* via OS replacement and Telnet through laptop. (Hobby project, not available on Github)