

# Andrew Schoonmaker

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18636 Wildlife Way BR, LA

## Education and Portfolio

Louisiana Tech University, Ruston, LA (2017-2021)

Major: Cyber Engineering      Minors: Computer Science and Mathematics      GPA: 3.82      [schoobydrew.github.io](https://github.com/schoobydrew)

Coursework: Computer Network Security, Reverse Engineering, Cryptography, Science of Computing, Data Structures, Advanced Data Structures and Algorithms, Circuits, Microprocessors, Systems Programming, Operating Systems, Discrete Math, Public Speaking, Speech and Debate, Technical Writing

## Technical Skills

Software: Python, Java, C, C++, Kali Linux, Nessus, Nmap, FreePbx, Protégé, Spice Netlists, Verilog, VHDL, OpenCV

Service: Penetration testing, Security Policy, Social Engineering: Phishing and Vishing, Software Development, G Code Deployment

Certifications: Security+ CompTIA, Ham Radio Technician      Clearance: Active DoD Secret Security Clearance

## Projects and Experience

### Secure Software Research Engineering Intern, Radiance Technologies (March 2019 – Present) Ruston, LA

- Implemented DEVS model for a system of systems simulation for large amounts of data
- Leveraged description logic and ontologies to develop a machine learning reasoner to infer complex relationships
- Researched novel ways to develop cutting edge technology with machine learning algorithms and TPKB's and Markov logic
- Applied computer vision and machine learning techniques to process arbitrary pictures of researched specimen

### Associate Security Analyst, Trace Security (May 2017 – August 2018) Baton Rouge, LA

- Ran External Penetration tests against financial institutions and medium sized businesses
- Spoofed phone calls to perform remote social engineering attacks against companies
- Phished company wide email systems
- Reviewed financial institution technology and security policy for best industry practices
- Trained new full time employees on various tasks like social engineering
- Scanned internal and external networks for Vulnerability Assessments

### AICS Development Team (Spring 2018) Ruston, LA

- Developed real world scenarios related to national security and cyber topics
- Created and tested detail-oriented puzzles presented incrementally over the course of a week

### Robotics Team (2016-2017) Baton Rouge, LA

- Built a robot to compete in the FIRST Robotics Competitions
- Worked on the Electrical Team to wire the robot's circuits
- Manufactured sheet metal and wooden parts for the robot to use in game

### Cyber Discovery 1.0 and 2.0 (2014-2015) Ruston, LA

- Competed in a cyber security camp put on by NICERC, the Department of Homeland Security, and LA Tech
- Presented solutions to national security for AICS (Analysis and Investigation through Cyber-based Scenarios)

### Recreational Programming

- USB Baiting – created a program that masquerade on a USB drive to test users and remotely log to a server
- NASA API – developed a web interface to make request data from the NASA image archive API
- Productivity – made a Nmap parser to CSV files
- BiteWise – app that leverages machine learning to generate a weekly meal prep budget from a platter of food

## Community Awards and Involvement

Eagle Scout of Boy Scout Troop 888 (August 2016), Man of the Year – Catholic High School (Class of 2017), National Merit Finalist and Scholar (2017), Annie Low Stiles Scholarship (2018), Secretary of Association of Cyber Engineers (2018), Stella Roman Foundation Bell Grant (2018), Vice-President of Association of Cyber Engineers (2019), 1<sup>st</sup> Place Winning team for Capital One SES Hackathon