

Rowan Hart

2331 Bainbridge Court
West Lafayette, IN 47906

(505)-321-2544
rowanbhart@gmail.com

Education

Purdue University, West Lafayette IN

Masters in Computer Science

May 2022

CGPA: N/A

Bachelor of Science in Computer Science

December 2020

CGPA: 3.55/4.0

Clearance

- Active DoD Top Secret Security Clearance

Technical Skills

- C/C++, Python, Java, Lua, Shell scripting, Javascript
- Low-level and kernel development and programming
- Reverse Engineering, Exploit development
- IDA Pro, Binary Ninja, and Ghidra plugin development, Angr symbolic execution development
- Linux, Windows, and MacOS hardening, Digital forensics, Incident response
- VMWare ESXi Management, Server and network administration, Docker development and deployment

Relevant Experience

- **Research Innovations Incorporated** **August 2020 - Present**
 - Research and development of automated binary analysis systems
- **Purdue University Graduate Research Assistant** **January 2020 - Present**
 - Develop automated exploit rehosting tools using the angr symbolic execution framework
 - Develop automated binary patching tools to improve fuzzing capabilities and coverage
- **Purdue University Graduate Teaching Assistant** **August 2019 - Present**
 - Maintain the codebase for the code standard linter for C programming courses
 - Teach and assist students with C, Systems Programming, Operating Systems development, and debugging skills
 - Developed project specifications and handouts, project and solution source code, and automated test cases
- **Northrop Grumman Xetron** **May 2018 - August 2020**
 - Performed reverse engineering of operating system internals and embedded systems, developed large C/C++ and Python projects
 - Developed an IDA Pro plugin for automated control flow analysis and path emulation for vulnerability research and exploit development
 - Created and hosted a Capture The Flag competition, organized and configured infrastructure and created a series of reverse engineering challenges
 - Extended a binary comparison tool with additional functionality for metric acquisition in C++ and python
- **Purdue University b01lers Capture The Flag Team - Vice President** **August 2017 - Present**
 - Coordinated, hosted, and developed challenges for multiple public CTF competitions with over 600 scoring teams
 - Coordinate and create training curriculum development and learning Capture the Flag events to further the skills of team members
 - Solve Challenges in Reverse Engineering, Binary Exploitation, programming, web exploitation, forensics, and steganography
- **Purdue University CERIAS Collegiate Cyber Defense Competition Team** **August 2017 - May 2018**
 - Wrote automation utilities and hardened networks, services, and systems against intrusion using industry-standard security techniques.

Honors and Awards

- 1st Place Team member, TAMUCTF **March 2020**
- 2nd Place Indiana CCDC Team Member **March 2018**
- DefCamp CTF Finals Qualifying Team Member **September 2017**
- Purdue Presidential Scholarship Recipient **August 2017**
- CyberPatriot IX National Finalist Team Captain **August 2016 - May 2017**
- Cyber Patriot Four-time 1st Place State, Four-time 1st Place Regional Team **August 2013 - May 2017**
- Boy Scouts of America Eagle Scout Award **December 2012**