Rowan Hart

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Education

Purdue University, West Lafayette IN   **May 2021**
Bachelor of Science in Computer Science
CGPA: 3.49/4.0

Clearance

- Active DoD Top Secret Security Clearance

Technical Skills

- Linux, Windows, and MacOS hardening, vulnerability analysis, incident response, forensics
- C++, C, Java, Python, Shell scripting, Javascript, Vue.js web development
- Reverse Engineering, Exploit development, GTK interface development
- VMWare ESXi Management, Server and network administration
- IDA Pro, Binary Ninja plugin development, Angr symbolic execution development

Relevant Experience

- **Purdue University Undergraduate Research Assistant**   **January 2020 - Present**
  - Developed automated exploit rehosting tools using the angr symbolic execution framework
- **Purdue University Undergraduate Teaching Assistant**   **August 2019 - Present**
  - Maintain the codebase for the code standard linter for C programming courses
  - Taught and assisted students with C programming and deguging 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, developed C/C++ in a large code base
  - Developed an IDA Pro plugin for automated control flow anlysis and path emulation for vulnerability research and exploit development
  - Performed vulnerability research on an embedded system and used a variety of techniques to automate analysis
  - Created and hosted a Capture The Flag competition, organized and configured infrastructure and created a series of reverse engineering challenges
  - Extended the X-RAD binary comparison tool with additional functionality for metric acquisition in C++ and python
- **Purdue University b01lers Capture The Flag Team - Event Coordinator**   **August 2017 - Present**
  - Coordinated, developed, and hosted a public CTF competition with over 650 scoring teams
  - Coordinate and create training curriculum development, teaching, and 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 harden networks, services, and systems against intrusion using industry-standard security techniques.
- **Cyber Patriot Team Captain/Co-Captain**, LCHS Marine Corps JROTC   **August 2013 - June 2017**
  - Built challenges and virtual environments using VMWare and shell scripting to engage and mentor team members for hands-on learning in a technically challenging environment
  - Created scripts and tools to streamline system hardening, vulnerability analysis, and malware identification and remediation on Windows and Linux systems

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**
- **National Honor Society, LCHS**   **August 2015 - May 2017**
- **Cyber Patriot Four-time 1st Place State, Four-time 1st Place Regional Team** **August 2013 - May 2017**
- **Sandia National Labs Thunderbird Cup 1st Place Team Captain**   **October 2016 - August 2017**

- **National Merit Scholarship Finalist** **March 2017**
- **Boy Scouts of America Eagle Scout Award** **December 2012**