# **MATTHEW HAGAN**

Austin, TX matt@doublediamond.io (720) 291-6459

## **WORK EXPERIENCE**

# Rapid7, Penetration Tester

Austin, TX, Jan 2022 – Present

- Consulted to top Fortune 500 companies to conduct internal, external, phishing, vishing, wireless and web app based penetration testing.
- Interacted directly with client senior leadership to scope engagements, document vulnerability findings and present those findings directly to over 40 client senior leadership teams.
- Worked cross functionally to expand Rapid7's internal penetration testing team tooling.

### Rapid7, Software Security Engineer

Austin, TX, Aug 2020 – Dec 2021

- Pioneered a weekly penetration testing lab series aimed at increasing security knowledge for developers. This resulted in 11 different teams gaining first hand knowledge of an attacker's mindset over 15 months.
- Re-engineered company-wide Jenkins CI/CD pipeline utilizing VCenter and Chef configuration-as-code. This resulted in saving over 400 man hours per month across hundreds of developers.
- Migrated Metasploit Pro from Ruby on Rails 4 to 5 while adhering to test-driven development standards. This resulted in the removal of 27 distinct customer-facing bugs.
- Utilized Java, Spring and Terraform to implement a new feature into Insight Vulnerability Management platform that allows end-users to have custom scoped policies tailored to their network needs.

#### Fidelity Investments, Full Stack Security Developer

Merrimack, NH, May 2019 – Aug 2019

- Discovered a critical vulnerability within the baseboard management controllers upon penetration testing new Intel and AMD enterprise infrastructure servers.
- Upon discovery, an extensive security report was designed and delivered on the vulnerability where I directly presented the findings to the Senior Vice President of Fidelity Investments.
- Utilized DevOps development practices in Docker, Go, Python, Bash, and AngularJS to increase performance of cloud-based compute platforms.

#### **PROJECTS**

#### Major Qualifying Project (Senior Thesis)

WPI, Aug 2019 – May 2020

- Conducted research to create a security descriptor protocol and firewall middlebox with an elliptic curve external packet wrapper with the aim of preventing botnet attacks for residential consumers.
- Published a summary of my research in a paper entitled, "Securing residential IoT networks through intent based encryption and categorization".

#### **EDUCATION**

#### Worcester Polytechnic Institute, Worcester, MA

May 2020

Bachelor of Science, Computer Science (Cyber Security) & Electrical/Computer Engineering

GPA 3.86/4.00

#### **SKILLS AND PROFICIENCIES**

Java, Spring, Python, Ruby, Rails, C, Go, Swift, Bash, Rust, JavaScript, SQL, C#, MATLAB, x86-64 Assembly, and Angular/AngularJS, AWS (EKS, EC2, MSK, API Gateway, Lambda, RDS, S3, VPC), Jenkins, Chef, Kubernetes, Terraform, Atlantis, Nmap, Metasploit Framework, Aircrack-ng, BurpSuite, Wireshark, Docker CERTIFICATIONS AND LEADERSHIP

# Offensive Security Certified Professional

July 2021 – Present

- Achieved the OSCP certification, as measured by a rigorous 48 hour exam and report where the objective was to evaluate the network, identify systems, and exploit flaws while reporting the findings back to Offensive Security. On average, security professionals require 2-3 attempts to pass, whereas this was a pass on the first attempt.
- Employed multiple different vulnerabilities to gain administrative level access to several machines.
- Created and delivered an extensive exam and lab report of my findings to the exam proctors.

Member, AHA (Austin Security Professional Group)

Aug 2020 – Present

Member, Tau Beta Pi (Engineering Honor Society)

Mar 2020 – Present

President, Eta Kappa Nu (IEEE Honor Society)

Dec 2018 - Dec 2019