# Jinwoo Yom

(336) 251-5313 • www.jinwooyom.com • jinwoo7@vt.edu

## **OBJECTIVE**

An internship position for Summer 2018 at a development team where I can utilize my software development skills and my passion for cyber security to develop, test and deliver secure applications.

### **EDUCATION**

College of Engineering, Virginia Tech, Blacksburg, VA

2017 - Present

Master of Science in Computer Engineering, Area of focus in Networks and Cybersecurity

**College of Engineering, Virginia Tech**, Blacksburg, VA | **GPA: 3.57/4.00**, Dean's List **Bachelor of Science in Computer Engineering**, Minor in Computer Science

2013 - 2017

# **SKILLS**

- Prog. Languages: Java, C++, C, PHP, JavaScript, Typescript, NodeJS C#, Python, HTML5, CSS3, Assembly (MIPS)
- Database: MySQL, NoSQL, MongoDB, Elastic Search, DynamoDB, LowDB
- Tools: Wireshark, Burp Suite, Hydra, SQL map, Unity 5, Microsoft SSMS, BI Tool(iDashboard), Git, Swagger, Photoshop
- Languages: Fluent in Korean and English
- Leadership: (President) The Honors Society of IEEE Eta Kappa Nu

# **EXPERIENCE**

#### Virginia Cyber Range, Blacksburg, VA

Cyber Security/DevOps Developer

2017 - Present

- Responsible for the architecture of the Typescript based provisioning back-end stack for Virginia Cyber Range's internal REST services
- The software is designed to be platform independent and highly scalable to serve as one of the most critical components in the entire software system
- Automated component tests using Mocha/Chai framework and mocked data.

#### Facebook, Remote Hire

CTF Development Co-op

2017

- "DefCon r00tz Asylum CTF": Responsible for architecting, developing and testing various Capture the flag challenges
- Modularized the CTF challenges using Docker and AWS for quicker deployment and to increase security measures
- Led a scrum development methodology to streamline the development process and provide visibility to managers

#### Electronic Arts, Redwood City, CA

IT & Operations Intern

2016

- "The Metrics Project": Created IT Service Metrics dashboard to visualize data in a central location for users to access, interact, and analyze real time data to support business decisions; worked with Scrum methodology
- Troubleshot performance issue by optimizing database code; improved services response time by 40%

#### Electronic Arts, Redwood City, CA

Software Engineering Intern

2015

- Created educational games (based on StarTalk Radio) using Unity 3D game engine for the Xfinity Games platform
- Developed responsive and scalable browser-based controllers that users can access using various smart devices
- Led two other interns on independent project to develop a multiplayer game on the Xfinity Games platform using C#, NodeJS, HTML, CSS; proposed to Chief Creative Officer and his direct staff

## **PROJECTS**

#### Penetration Testing Live Targets, Blacksburg, VA

2017

- Documentations and proof of concept available at http://bit.ly/2oNi59Z
- Identified and exploited vulnerabilities in three different versions of the Globitek websites
- Hijacked a session using Burp Suite to gain administrator access to protected pages
- Executed a Cross-Site Request Forgery (CSRF) attack that utilizes the victim's session to edit database contents

## **Ubuntu Buffer Overflow Vulnerability Exploit,** Blacksburg, VA – (Language: C)

2017

- Disabled safety guards such as address space randomization, StackGuard protection and non-executable stack
- Obtained root access by redirecting a return address of a vulnerable C function to run a malicious shell code