

# Jinwoo Yom

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## 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 | **GPA: 3.85/4.00** 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 2013 - 2017  
**Bachelor of Science in Computer Engineering**, Minor in Computer Science

## SKILLS

- **Prog. Languages:** Java, C++, C, PHP, JavaScript (ES6), 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 2017 - Present  
Cyber Security/DevOps Developer

- Responsible for the architecture of the Typescript based provisioning back-end stack for Virginia Cyber Range's internal RESTful API 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
- Utilized Docker and AWS services such as DynamoDB, EC2, SQS, and CloudWatch to improve scalability
- Contributed to the CICD pipeline through automating the component tests; improved the stability of the production branch by 70%

**Facebook**, Remote

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
- Troubleshoot 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

## 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