

Dakota Madden-Fong

SOFTWARE ENGINEER · WEB DEVELOPER

3624 Moraga St, San Francisco, CA 94122, USA

☎ (415) 810-0334 | ✉ maddenfong@gmail.com | 🏠 TrifectaIII.github.io | 📱 TrifectaIII

Education

Willamette University, College of Liberal Arts

B.A. IN COMPUTER SCIENCE

Salem, Oregon

August 2013 - May 2018

Skills

Programming Python, C/C++, Scala, JAVA, Node.JS, OCaml, LaTeX
Web Django with Python, Express with Node.JS, HTML5, LESS
Languages Korean, English, Japanese, Chinese

Experience

R.O.K Cyber Command, MND

SOFTWARE ENGINEER & SECURITY RESEARCHER (COMPULSORY MILITARY SERVICE)

Seoul, S.Korea

Aug. 2014 - Exp. Apr. 2016

- Implemented a military cooperation system which is web based real time messenger in Scala on Lift.
- Improved functionality on military command and control system for incident response with Java Servlet.
- Lead engineer on agent-less backtracking system that can discover client device's fingerprint(including public and private IP) independently of the Proxy, VPN and NAT.

NEXON

GAME DEVELOPER INTERN AT GLOBAL INTERNSHIP PROGRAM

Seoul, S.Korea & LA, U.S.A

Jan. 2013 - Feb. 2013

- Developed in Cocos2d-x an action puzzle game(Dragon Buster) targeting U.S. market. Implemented API server which is communicating with game client and In-App Store, along with two other team members who wrote the game logic, designed game graphics.
- Won the 2nd prize in final evaluation.

Undergraduate Research, Computer Vision Lab(Prof. Bohyung Han)

RESEARCHER FOR <DETECTING VIDEO'S TORRENTS USING IMAGE SIMILARITY ALGORITHMS>

Pohang, S.Korea

Sep. 2012 - Feb. 2013

- Researched means of retrieving a corresponding video based on image contents using image similarity algorithm.
- Implemented prototype that users can obtain torrent magnet links of corresponding video relevant to an image on web site.

Software Maestro (funded by Korea Ministry of Knowledge and Economy)

SOFTWARE ENGINEER TRAINEE

Seoul, S.Korea

Jul. 2012 - Jun. 2013

- Performed research memory management strategies of OS and implemented in Python an interactive simulator for Linux kernel memory management.

ShitOne Corp. (Start-up company)

SOFTWARE ENGINEER

Seoul, S.Korea

Dec. 2011 - Feb. 2012

- Developed a proxy drive smartphone application which connects proxy driver and customer. Implemented overall Android application logic and wrote API server for community service, along with lead engineer who designed bidding protocol on raw socket and implemented API server for bidding.

SAMSUNG Electronics

FREELANCE PENETRATION TESTER

S.Korea

Sep. 2013, Mar. 2011 - Oct. 2011

- Conducted penetration testing on SAMSUNG KNOX, which is solution for enterprise mobile security.
- Conducted penetration testing on SAMSUNG Smart TV.

Extracurricular Activity

B10S (B1t On the Security, Underground hacker team)

S.Korea

CORE MEMBER

Nov. 2011 - PRESENT

- Gained expertise in penetration testing areas, especially targeted on web application and software.
- Participated on a lot of hacking competition and won a good award.
- Held several hacking competitions non-profit, just for fun.

WiseGuys (Hacking & Security research group)

S.Korea

MEMBER

Jun. 2012 - PRESENT

- Gained expertise in hardware hacking areas from penetration testing on several devices including wireless router, smartphone, CCTV and set-top box.
- Trained wannabe hacker about hacking technique from basic to advanced and ethics for white hackers by hosting annual Hacking Camp.

PoApper (Developers' Network of POSTECH)

Pohang, S.Korea

CORE MEMBER & PRESIDENT AT 2013

Jun. 2010 - PRESENT

- Reformed the society focusing on software engineering and building network on and off campus.
- Proposed various marketing and network activities to raise awareness.

PLUS (Laboratory for UNIX Security in POSTECH)

Pohang, S.Korea

MEMBER

Sep. 2010 - Oct. 2011

- Gained expertise in hacking & security areas, especially about internal of operating system based on UNIX and several exploit techniques.
- Participated on several hacking competition and won a good award.
- Conducted periodic security checks on overall IT system as a member of POSTECH CERT.
- Conducted penetration testing commissioned by national agency and corporation.

MSSA (Management Strategy Club of POSTECH)

Pohang, S.Korea

MEMBER

Sep. 2013 - PRESENT

- Gained knowledge about several business field like Management, Strategy, Financial and marketing from group study.
- Gained expertise in business strategy areas and insight for various industry from weekly industry analysis session.

Honors & Awards

INTERNATIONAL

2014	Finalist , DEFCON 22nd CTF Hacking Competition World Final	Las Vegas, U.S.A
2013	Finalist , DEFCON 21st CTF Hacking Competition World Final	Las Vegas, U.S.A
2011	Finalist , DEFCON 19th CTF Hacking Competition World Final	Las Vegas, U.S.A
2012	6th Place , SECUINSIDE Hacking Competition World Final	Seoul, S.Korea

DOMESTIC

2015	3rd Place , WITHCON Hacking Competition Final	Seoul, S.Korea
2013	Silver Prize , KISA HDCON Hacking Competition Final	Seoul, S.Korea
2013	2nd Award , HUST Hacking Festival	S.Korea
2010	3rd Award , HUST Hacking Festival	S.Korea
2012	3rd Award , Holyshield 3rd Hacking Festival	S.Korea
2011	2nd Award , Holyshield 3rd Hacking Festival	S.Korea
2011	5th Place , PADOCON Hacking Competition Final	Seoul, S.Korea

Presentation

6th CodeEngn (Reverse Engineering Conference)

Seoul, S.Korea

PRESENTER FOR <DEFCON 20TH : THE WAY TO GO TO LAS VEGAS>

Jul. 2012

- Introduced CTF (Capture the Flag) hacking competition and advanced techniques and strategy for CTF

6th Hacking Camp - S.Korea

S.Korea

PRESENTER FOR <METASPLOIT 101>

Sep. 2012

- Introduced basic procedure for penetration testing and how to use Metasploit

Writing

A Guide for Developers in Start-up

FOUNDER & WRITER

- Drafted daily news for developers in Korea about IT technologies, issues about start-up.

Facebook Page

Jan. 2015 - PRESENT

AhnLab

UNDERGRADUATE STUDENT REPORTER

- Drafted reports about IT trends and Security issues on AhnLab Company magazine.

S.Korea

Oct. 2012 - Jul. 2013

Program Committees

2013 **Organizer & Co-director**, 1st POSTECH Hackathon

S.Korea

2012 **Staff**, 7th Hacking Camp

S.Korea

2012 **Problem Writer**, 1st Hoseo University Teenager Hacking Competition

S.Korea

2012 **Staff & Problem Writer**, JFF(Just for Fun) Hacking Competition

S.Korea