

# Federico Marra

MSC STUDENT IN COMPUTER SCIENCE AND ENGINEERING @ DTU · SOFTWARE ENGINEER

Lundtoftevej 162F, Kongens Lyngby, Copenhagen, Denmark

☎ +39 328 146 0202 | ✉ s243138@dtu.dk | 📷 federicomarra | 🌐 federico-marra-it | 📺 live:fecrom\_1

## Summary

Current Site Reliability Engineer at start-up company Kasa. 7+ years experience specializing in the backend development, infrastructure automation, and computer hacking/security. Super nerd who loves Vim, Linux and OS X and enjoys to customize all of the development environment. Interested in devising a better problem-solving method for challenging tasks, and learning new technologies and tools if the need arises.

## Work Experience

### SNAP4 S.r.l.

Sesto Fiorentino, Florence, Italy

SOFTWARE ENGINEER

March 2024 - August 2024

- Provisioned an easily manageable hybrid infrastructure(Amazon AWS + On-premise) utilizing IaC(Infrastructure as Code) tools like Ansible, Packer and Terraform.
- Built fully automated CI/CD pipelines on CircleCI for containerized applications using Docker, AWS ECR and Rancher.
- Designed an overall service architecture and pipelines of the Machine Learning based Fashion Tagging API SaaS product with the micro-services architecture.
- Implemented several API microservices in Node.js Koa and in the serverless AWS Lambda functions.
- Deployed a centralized logging environment(ELK, Filebeat, CloudWatch, S3) which gather log data from docker containers and AWS resources.
- Deployed a centralized monitoring environment(Grafana, InfluxDB, CollectD) which gather system metrics as well as docker run-time metrics.

### Myself

Florence, Italy

PRIVATE TUTOR

Jan. 2016 - Jun. 2017

- Implemented RESTful API server for car rental booking application(CARPLAT in Google Play).
- Built and deployed overall service infrastructure utilizing Docker container, CircleCI, and several AWS stack(Including EC2, ECS, Route 53, S3, CloudFront, RDS, ElastiCache, IAM), focusing on high-availability, fault tolerance, and auto-scaling.
- Developed an easy-to-use Payment module which connects to major PG(Payment Gateway) companies in Korea.

### R.O.K Cyber Command, MND

Seoul, S.Korea

SOFTWARE ENGINEER & SECURITY RESEARCHER (COMPULSORY MILITARY SERVICE)

Aug. 2014 - Apr. 2016

- 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.
- Implemented a distributed web stress test tool with high anonymity.
- Implemented a military cooperation system which is web based real time messenger in Scala on Lift.

### NEXON

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

GAME DEVELOPER INTERN AT GLOBAL INTERNSHIP PROGRAM

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 and designed game graphics.
- Won the 2nd prize in final evaluation.

### ShitOne Corp.

Seoul, S.Korea

SOFTWARE ENGINEER

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 rawsocket and implemented API server for bidding.

### SAMSUNG Electronics

S.Korea

FREELANCE PENETRATION TESTER

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.

## Education

### DTU (Technical University of Denmark)

Lyngby, Copenhagen, Denmark

MASTER COURSE IN COMPUTER SCIENCE AND ENGINEERING

September 2024 - Current

Get a Chun Shin-Il Scholarship which is given to promising students in CSE Dept.

### UNIFI (University of Studies of Florence)

Florence, Italy

BACHELOR COURSE IN COMPUTER ENGINEERING

September 2019 - April 2024

- Address:** Piazza S.Marco, 4, 50121 Firenze (Italy)
- Website:** <https://www.ing-inl.unifi.it/index.html?newlang=eng>

## 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.

## **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 - Jun. 2017*

- 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 - Jun. 2017*

- 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.