

## MINGUN PAK

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1253 1/2 36th Place, Los Angeles, CA 90007

### EDUCATION

M.Sc. in Computer Science, University of Southern California, Los Angeles, CA

May 2018

B.Sc. in Computer Science, Inha University, Incheon, South Korea

Aug 2015

### TECHNICAL SKILLS

<b>Programming language</b>	Python(strong), C++, C#, Ruby, Java, PHP, JavaScript, HTML5, CSS, Assembly
<b>Database</b>	MySQL(strong), PostgreSQL, MongoDB
<b>Framework</b>	Django(strong), Flask, Android, Selenium, jQuery, AngularJS, ReactJS, Redis, Bootstrap, Tensorflow, openCV, D3js, Caffe
<b>Software</b>	AWS, Heroku, Docker, Google Analytics, Github, Trello, Source Tree, Slack

### WORK EXPERIENCE

**Software Developer Intern, Samsung Electronics, Seoul, South Korea**

Mar 2014 – Apr 2015

Technical Skills List: **Assembly, C, C++, Computer Architecture, System Programming**

- Designed the 64Bit Multi-Core OS prototype that increases performance by 50% of context switching speed

**Software Developer Intern, Ministry of Science, Seoul, South Korea**

Jul 2013 – Feb 2014

Technical Skills List: **Ruby, Android, Secure Coding, Compiler**

- Led as project manager to create the Automatic Secure Coding Verification Tool for Android Apps that detects vulnerable source code by utilizing approximately 100 rules
- Designed the Java Source Code Parser using Ruby

### PROJECTS

**Sudoku Solver Application**

Sep 2016 – Oct 2016

Technical Skills: **Python, Tensorflow, OpenCV, Deep Learning**

- Designed the solver that recognizes Sudoku in a given natural picture like a newspaper and then find the solution.
- Improved MNIST data set up to 99.58% accuracy by Deep Learning

**Auto Tagging Gallery App**

Mar 2015 – Jun 2015

Technical Skills: **Android, Python, Flask, MySQL, Caffe API, OpenCV, Deep Learning**

- Created the gallery app that automatically detects and tags objects within photographs
- Developed an unique algorithm utilizing the SURF and Union-find algorithm to increase speed of image region detection, the prior step to extracting an image's feature point, which enables the machine learning

### PUBLICATIONS

Pak, M. An Analysis on Techniques for Preventing Android Reverse Engineering, *KIPS*

Apr 2014

### TEACHING EXPERIENCE

Fast Campus Co., Seoul, South Korea

Jan 2016 – Apr 2016

- Lecture: Web Programming School - **Python, Linux, Network, Django, Data Structure**

National Cyber Command of National Defense, Seoul, South Korea

Mar 2014 – Apr 2014

- Lecture: **Kali Linux Penetration Testing**

Korea South-Eastern Power Co., Seoul, South Korea

Dec 2013 – Dec 2013

- Lecture: **System Hacking, Reverse Engineering, Web and Network Hacking, PenTesting**

### AWARDS

2nd place, Programming Contest, Inha University

Sep 2014

2nd place, White Hat Hacking Contest, Samsung Electronics

Jun 2014

1st place, Academy Hackerton, Inha University

Dec 2013

Finalist, 10th KISA HDCON(Hacking Defence Contest)

Nov 2013

27th place out of 1540 teams(worldwide), Codegate CTF, MSIP, South Korea

May 2013

2nd place, H.U.S.T Hacking Festival, Hongik University

Dec 2012