# **MINGUN PAK**

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#### **EDUCATION**

M.Sc. in Computer Science, University of Southern California, Los Angeles, CA B.Sc. in Computer Science, Inha University, Incheon, South Korea

Dec 2018

Aug 2015

## **TECHNICAL SKILLS**

Specialty NLP(strong), Web Tech(strong), Machine Learning, Android, iOS, Computer Security

Programming language Python(strong), Java ,C++, C#, Swift3, Ruby, PHP, JavaScript, HTML5, CSS

Database MySQL(strong), PostgreSQL, MongoDB, MSSQL

Framework Django, Tensorflow, Keras, PyTorch, Caffe, NLTK, Flask, Selenium, jQuery, AngularJS

Software AWS, Heroku, Docker, Google Analytics, Github, Trello, Source Tree, Slack

#### **WORK EXPERIENCE**

## Software Development Intern, DreamTek Industries - Los Angeles, California

Sept 2017 - Present

Technical Skills List: Python, NLP, NTLK, Flask, Flask-RESTPlus, MongoDB

- Implemented back-end features to optimize financial services selection and create a true banking API
- Contributed to POS tagger using CRF and product matching & ranking algorithms

#### Research and Development Intern, Gridspace - Los Angeles, California

May 2017 – July 2017

Technical Skills List: Python, Keras, Pytorch, Natural Language Processing

- Designed Sentiment analyzer which has 91.5% accuracy using hybrid CNN+LSTM model with bi-gram
- Developed Anomaly detector based on call log, which uses GRU+Attention model with gradient-clipping & coverage

## 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
- Handpicked member for core development team that focused on multitasking & multithreading, device drivers, code reviews, and end-to-end integration

#### Research and Development Intern, Ministry of Science - Seoul, South Korea

Jul 2013 - Feb 2014

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

- Created 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

#### PROJECT EXPERIENCE

Web and iOS Project

Jan 2017 - Apr 2017

Technical Skills: Swift3, Javascript, PHP, jQuery, Bootstrap, AngularJS, Google Cloud, FB Graph API, Maps API

- Developed a responsive webpage which allows us to search for our friends through all the famous SNS
- Created iOS app which exactly acts like the webpage based on Swift3

#### **Android and Machine Learning Project**

Mar 2015 - Jun 2015

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

- Created the gallery app that automatically detects and tags objects within photographs
- · Developed a unique algorithm using the SURF and Union-find algorithm to increase speed of image region detection.

#### **TEACHING EXPERIENCE**

# Lecturer, Fast Campus Co. - Seoul, South Korea

Jan 2016 - Apr 2016

· Lecture: Web Programming School - Python, Linux, Network, Django, Data Structure, Github, Web Scraping

## <u>AWARDS</u>

2nd place, Programming Contest, Inha University, South Korea	Sep 2014
2nd place, White Hat Hacking Contest, Samsung Electronics, South Korea	Jun 2014
1st place, Academy Hackerton, Inha University, South Korea	Dec 2013
2nd place, H.U.S.T Hacking Festival, Hongik University, South Korea	Dec 2012