## Grace (Hae-Soo) Esther Lee

**Current Address** 

glee8804@gmail.com Prime Apt, GwangJinGu, Seoul, South Korea

**Education and Training** 

**Seoul National University** Seoul, South Korea Mar 2018 - Present Master's in Computer Science

Currently enrolled in Visual Analytics and Advanced Theory in Computation courses

University of Illinois, Springfield Springfield, Illinois

Bachelor of Arts in Computer Science, Online Degree Jan 2016 -

**Johns Hopkins University** Baltimore, Maryland Bachelor of Arts in Public Health Sep 2007 - May 2012

**Technical Skills and Accomplishments** 

Programming/Languages Python(2017-Present), Java6-8(2014-Present), Android(2016), Javascript(2014, 2017),

Spring(2014-2017), Keras(2017-Present), Tensorflow(2017-Present), D3(2018-Present)

Enjoy unit tests and functional tests

Database Management Oracle RDBMS(2014-2015), MariaDB(2016-Present), PostgreSQL(2018-Present),

MongoDB(2017-Present), SQLite(2018)

**Tools** DataGrip, IntelliJ, pyCharm, Eclipse, Slack, JIRA, Jenkins, Git, Android Studio, GoCI

Language Fluent in English and Korean

**Experience** 

Seoul National University, Database System Lab (dbs.snu.ac.kr)

Seoul, South Korea Researcher Jan 2018 - Present

Drug Repurposing Through Drug and Adverse Effect Pair Extraction from Published Literature

Responsible to build a knowledge construction base pipeline for drugs and adverse effects from the published literature with machine learning and natural language processing

Python3, Java8, PostgreSQL, Jupyter Notebook, pyCharm, keras, tensorflow, Git, D3, nltk

Samsung SDS, Agile Core Team (www.samsungsds.com)

Feb 2016 - Dec 2017 Software Engineer

NexShop Micro Service Architecture, Remote Management System

Aug 2017 - Dec 2017

Seoul. South Korea

- Responsible as an anchor of the project to develop retail marketing display device management server and provide related APIs along with continuous integration and testing environment
- Java8, Spring Boot, MongoDB, AWS(S3, EC2, Elastic Beanstalk), IntelliJ, Git, Jenkins, JIRA

NexShop Retail Marketing Display Player

Jan 2017 - July 2017

- Responsible as an anchor of the project to develop web player application for Tizen LFD
- Javascript ES6, Babel, Redux, Webpack, Jenkins, Webstorm, Git, JIRA

Xeed, Fresh Food Pick-up Reservation Service

Dec 2016 - Jan 2017

- Develop android application and respective server with continuous integration and testing environment
- Java8, Android, Mockito, AWS(S3, DynamoDB), Eclipse, JIRA, Git, Bitbucket, CircleCI

### Daegu Bank Android Library with Fido

Aug 2016 - Dec 2016

- Develop android library and server for Daegu Bank utilizing Fido(Fast IDentity Online) alliance
- Java6, Android, Mockito, Spring, JPA, MariaDB, Git, Go CI, IntelliJ

### Samsung Life Sales Support System POC

July 2016

- Develop insurance sales support application for tablet(Window10) utilizing Electron
- Javascript, Git, Electron

## Wellness, Mobile Application for Diabetic Patients

Mar 2016 - June 2016

- Develop a mobile application and respective server system for diabetic patients to monitor health condition such as glucose level via Bluetooth connection to a glucose meter
- Java8, Android, Mockito, MySQL(MariaDB), Spring, Git, Go CI

## Samsung SDS, Solution Development Group

Software Engineer

Seoul, South Korea Aug 2014 - Feb 2016

#### Electronic Health Record Solution

Nov 2014 - Feb 2016

- Develop common library and Delphi components for all hospital departments
- Delphi, Java6, Oracle 11g, SVN, Git, Jenkins

#### **Samsung Convergence Software Academy**

Trainee for Computer Science Track

Seoul, South Korea Dec 2013 - June 2014

- Awarded top final four for project competition as with Real Time Health Monitoring System with Mobile Application for Patients with Chronic Disease and Care Providers
- Java6, Android, Javascript, Oracle 11g, jquery

## UNHCR (The UN Refugee Agency) (www.unhcr.or.kr)

Seoul, Korea

Intern

Feb 2011 - May 2011

• Responsible for research of media coverage of UNHCR and global refugee issues

## **Personal Project**

#### Medical Informatics Analysis - Advance course(Asan Hospital, Seoul)

Oct 2018 - Present

Learn diverse medical informatics analysis technologies from medical images, genomics, and EHR

## Visualization Cross-Platform Application

Sep 2018 - Present

- Visualize diverse charts and tools for topic modeling and text classification results with D3 and electron.
- Python3, Flask, Javascript, D3, electron

# Football Analysis (Winning Goal, Key Performance Indicators)

Dec 2017 - Aug 2018

https://github.com/madigun697/football data analysis.git

- Collect football data via crawling and converting PDF files and analyze the impact of the first goal of winning and trends of goals time through statistics and machine learning
- Python3, keras, tensorflow, MariaDB, Slack

#### North Korean Elite Network Analysis

Mar 2018 - June 2018

- Collect information on North Korean Officials via crawling and create an overall network of the society applying different weights on education, career history, family and more
- Python3, networkX, Selenium, MariaDB

#### Visualize Bitcoin Trade Price via Charts

June 2017

Request bitcoin trade price from Poloniex and Bithumb via APIs and visualize the trend with jquery and node is

## **Teaching Assistant Experience**

Seoul National University Big Data Academy

- Big Data Programming hands-on session with Python, Pandas, Numpy, SQLite, MongoDB
- https://github.com/joyce04/python\_database\_class

Seoul, Urban Data Science Laboratory Nov 5 - Nov 9 2018