

# Grace (Hae-Soo) Esther Lee

## Current Address

Prime Apt, GwangJinGu,  
Seoul, South Korea

## U.S. Citizen

(82) 010-6601-9044  
[glee8804@gmail.com](mailto:glee8804@gmail.com)

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## Education and Training

### Seoul National University

Master's in Computer Science, **GPA:4.04/4.3(96.4%)**

Currently enrolled in Visual Analytics and Advanced Theory in Computation courses

Seoul, South Korea

Mar 2018 - Present

### University of Illinois, Springfield

Bachelor of Arts in Computer Science, Online Degree, **GPA: 3.94**

Springfield, Illinois

Jan 2016 -

### Johns Hopkins University

Bachelor of Arts in Public Health

Baltimore, Maryland

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](http://dbs.snu.ac.kr))

*Researcher*

Seoul, South Korea

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.samsungds.com](http://www.samsungds.com))

*Software Engineer*

Seoul, South Korea

Feb 2016 - Dec 2017

NexShop Micro Service Architecture, Remote Management System

Aug 2017 - Dec 2017

- 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
<ul style="list-style-type: none"> <li>Develop android library and server for Daegu Bank utilizing Fido(Fast IDentity Online) alliance</li> <li>Java6, Android, Mockito, Spring, JPA, MariaDB, Git, Go CI, IntelliJ</li> </ul>	
Samsung Life Sales Support System POC	July 2016
<ul style="list-style-type: none"> <li>Develop insurance sales support application for tablet(Window10) utilizing Electron</li> <li>Javascript, Git, Electron</li> </ul>	
Wellness, Mobile Application for Diabetic Patients	Mar 2016 - June 2016
<ul style="list-style-type: none"> <li>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</li> <li>Java8, Android, Mockito, MySQL(MariaDB), Spring, Git, Go CI</li> </ul>	
<b>Samsung SDS, Solution Development Group</b>	Seoul, South Korea
<i>Software Engineer</i>	Aug 2014 - Feb 2016
Electronic Health Record Solution	Nov 2014 - Feb 2016
<ul style="list-style-type: none"> <li>Develop common library and Delphi components for all hospital departments</li> <li>Delphi, Java6, Oracle 11g, SVN, Git, Jenkins</li> </ul>	
<b>Samsung Convergence Software Academy</b>	Seoul, South Korea
Trainee for Computer Science Track	Dec 2013 - June 2014
<ul style="list-style-type: none"> <li>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</li> <li>Java6, Android, Javascript, Oracle 11g, jquery</li> </ul>	
<b>UNHCR (The UN Refugee Agency) (<a href="http://www.unhcr.or.kr">www.unhcr.or.kr</a>)</b>	Seoul, Korea
<i>Intern</i>	Feb 2011 - May 2011
<ul style="list-style-type: none"> <li>Responsible for research of media coverage of UNHCR and global refugee issues</li> </ul>	
<b>Personal Project</b>	
Medical Informatics Analysis - Advance course(Asan Hospital, Seoul)	Oct 2018 - Present
<ul style="list-style-type: none"> <li>Learn diverse medical informatics analysis technologies from medical images, genomics, and EHR</li> </ul>	
Visualization Cross-Platform Application	Sep 2018 - Present
<ul style="list-style-type: none"> <li>Visualize diverse charts and tools for topic modeling and text classification results with D3 and electron.</li> <li>Python3, Flask, Javascript, D3, electron</li> </ul>	
Football Analysis (Winning Goal, Key Performance Indicators) <a href="https://github.com/madigun697/football_data_analysis.git">https://github.com/madigun697/football_data_analysis.git</a>	Dec 2017 - Aug 2018
<ul style="list-style-type: none"> <li>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</li> <li>Python3, keras, tensorflow, MariaDB, Slack</li> </ul>	
North Korean Elite Network Analysis	Mar 2018 - June 2018
<ul style="list-style-type: none"> <li>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</li> <li>Python3, networkX, Selenium, MariaDB</li> </ul>	
Visualize Bitcoin Trade Price via Charts	June 2017
<ul style="list-style-type: none"> <li>Request bitcoin trade price from Poloniex and Bithumb via APIs and visualize the trend with jquery and node.js</li> </ul>	

## 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](https://github.com/joyce04/python_database_class)

Seoul, Urban Data Science Laboratory

Nov 5 - Nov 9 2018