Jongwon Lee

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HIGHLIGHTS

App / 2017-2020 / Ruby on Rails, Android, iOS:

• SKKOOLBUS: Bus tracking application for shuttle bus system in Sungkyunkwan University, 6000+ downloads. It was created through UX design process and without the help of other faculties or professional programmers. It calculates expected arrival time for buses on server real-time. I plan to apply real-time deep learning to improve accuracy.

Project / 2019-2020 / Visualizing Multidimensional Data / Python / PDF:

• It is a project for a data visualization course in Indiana University by <u>YY</u>. It was open for both undergraduate and graduate student, thus it was challenging. However, it inspired me and introduced what a graduate school research looks like. I researched to solve the problem with visualizing multidimensional data with python.

Course / 2017 Fall / Human Computer Interaction / Sungkyunkwan University / A+:

- It was the first course at a university that dealt with multiple research papers both traditional and modern such as "Computers are social actors (Nass, 1994)" and "Feeling robots and human zombies" (Gray, 2012).
- This course was the reason why I was able to be certain that I will proceed my career to a graduate school. I suggested an e-book design applying HCI concepts as a final project and achieved A+ as a final grade.

Project / 2016-2017 / Indie-film Genie - Analysis on 'indie-film audience expectation / Grand Prize / Ruby on Rails:

It is a project for an informatics research competition. This focused on data analysis to predict indie-film audience. This
project was the first one for me to produce a meaningful insight collaborating my economics background and programming
skills.

Full Scholarship / 2013-2020 / Samsung:

Samsung Scholarship: I was selected by Samsung as I enter my first university, Sungkyunkwan with a full scholarship to fund
my bachelor's degree at Sungkyunkwan University.

Dual Degree Program / 2013-2020 / Sungkyunkwan University and Indiana University Bloomington:

• I was selected as a dual degree program student, acquiring two bachelor's degree from two universities. It was definitely challenging to meet graduate requirements for both school in a short period of time, however, it significantly helped me broaden my perspective on academics and culture from different environment.

PERSONAL STATEMENT

"As a prospective graduate with economics major and informatics minor and a dual degree student, I am looking to utilize my excellent versatility to pursue a research at data science area. I am particularly interested in a regression problem and visualizing multi-variate data to improve the accuracy of self-created bus tracking application that every student in my university uses."

EDUCATION

AUG 2018-MAY 2020 (expected)

Bachelor's/Economics (Major), Informatics (Minor) Indiana University (Indiana, USA)

Course Project for <u>data visualization course</u> / AUG 2019-JAN 2020 / <u>PDF</u> FA 2019 Dean's List

MAR 2013-MAY 2020 (expected)

Bachelor/Global Economics Sungkyunkwan University (Seoul, South Korea)

Research Assistant for professor Nielson Youngju / NOV 2016-MAR 2017:

- Conducted a research on Korean Indie-film audience expectation. (First Place at a SKKU informatics research competition)
- Managed professor Nielson Youngju's web blog.

Full Scholarship by Samsung / MAR 2013-MAY 2020

Selected through exams and interviews with a competition rate of 5.82:1.

PROFESSIONAL SKILL

Proficient in:

- Python: data analysis, visualization, won multiple awards with project using Python, machine learning
- Ruby on Rails: created a bus tracking app for my University, ranking system for a local game community, outsourcing, teaching experience

Intermediate level:

- HTML & CSS: creating websites for projects and outsourcing
- C#: created games with C#, Unity

WORK EXPERIENCE

JUN 2017-AUG 2017

Data Researcher/Platform Division/Smilegate (Gyeonggi-do, South Korea)

Internship – Intern that suggests new idea

- I was at first assigned with miscellaneous repetitive works to improve the company's platform project along with other interns. However, I proved that I can produce more than the company anticipates from interns by handing in extra works such as natural language analysis on Twitter and crawling data from YouTube, Google and other relevant sites.
- Even though I was an intern, I had the responsibility to explain how other employees can support my work since it became a part of the team's report. Balancing between n leading them but at the same time not breaking apart team structure and hierarchical order was challenging but learned through this opportunity.
- This connected to suggest a data analysis start-up at a AWS hackathon, creating a virtual start-up called <u>Omnisian</u>. I was awarded by AWS and received Amazon Echo as a prize. (AUG 2017)

OCT 2016-MAR 2017

Back end Developer/Ruby on Rails/LikeLion

Back-end Developer – Devotion that did not get attention

- It was one of the meaningful moment of my life that I was able to get paid a real salary to create a website. It was also for a project that meant to have a powerful support by the owner of the largest programming education organization in Korea. I was chosen by him to make a four people team and start from proposal to innovate university course grading community in Korea such as ratemyprofessor.com for US.
- I learned that how it is difficult to create a running webpage with authentication and search module and most importantly communicating with the owner that was not interested in the project. It was because the owner was busy taking care of his other projects and thought while our project was still going on.
- At the end, our team was finishing up the website with the full feature in an uncertainty like a dense fog. This project was
 ironically an incomplete project even though the start was promising than any other project. I loved this project than any
 other but at the same time had the most pain.
- This project made me promise myself, one day I will create a service that more than 5000 people use and the day did not
 come too late. (Bus tracking app for my university)

AWARDS

22 DEC 2016

Grand Prize/Ruby on Rails, Regression Creative Informatics Project/Sungkyunkwan University

Indie-film Genie – Analysis on 'indie-film audience expectation' – Steppingstone of data analysis

- I gathered and led a team to predict indie-film audience in Korea even though I had a bare knowledge on this area. I had to learn not only how to gather and process data but also how regression works in a few weeks. However, I enjoyed this too much that everything went smoothly and was able to achieve grand prize at this competition.
- I cast professor <u>Nielson Youngju</u> even though she was extremely busy and did not promise any help on this project. I had to find a way a sophomore year undergraduate can impress a professor and showed what our team is working on is actually relevant to this world.
- This <u>paper</u> concluded that domestic movie maniac's opinion and foreign index was not significant on expecting the number of audiences of indie-film that are imported to Korea, rather reveals and discusses how other variables impacts the model.
- As my expansion of knowledge went further, I delve more deeply on this dataset and area of study in 2020 for a course project of <u>data visualization course</u>.

30 OCT 2016

Nabla (∇) – The first game made by a game addict

• I took a year and a half from work and explored many fields and one of it was game development. I joined a game Jam and met great team members. We three was able to create a game in just three days from zero and it was chosen as the best 3 among 30 other teams. We continued to finish up this project for next two years and published it at play store.

31 AUG 2016

Grand Prize/Ruby on Rails, Data Analysis
Creative Informatics Project/Sungkyunkwan University

Analysis on the effect of 'Korean Legal Cap on Phone Subsidies'

31 AUG 2016 Grand Prize/EV3

Convergence Project/Sungkyunkwan University

Forest fire early detection and extinguishment tower with EV3 - targeting U.S. and Canada (Patent and Modeling)

29 SEP 2016

5th place among 200 teams/Ruby on Rails, Web Page LikeLion Hackathon 2016/LikeLion

<u>Tost</u> – English Academy Search Service

• It was my first web project that I created as a team that functions and has a full design. It made me feel I actually can create a visible outcome with programming.

PROFESSIONAL EXPERIENCE

MAY 2014-FEB 2016

Sergeant/Korean Army

Yongsan US Army Garrison (Seoul, South Korea)

Military Police / Directorate of Emergency Services (DES) / SEP 2015-FEB 2016:

• Interview and screen visitors accessing the military post and escort official visitors

Investigator / Criminal Investigation Command (CID) / MAY 2014-AUG 2015:

• Simultaneous interpretation during field investigation and translate official statements and legal documents

AUG 2016-JAN 2020

Simultaneous Interpreter & Translator
Seoul, South Korea

English-Korean Translation of a project proposal <u>Formula-E Seoul E-prix 2020</u> / 21 SEP 2019
English-Korean Translation of provisions and posters for <u>World Club Dome</u> Korea 2017 / 13 FEB 2017
English-Korean Simultaneous Interpretation at a meeting between LINE Korea and Google Japan / 19 AUG 2016

LEADERSHIP EXPERIENCE

MAR 2016-DEC 2017

Programming Club <u>Likelion</u> Tutor, President of Sungkyunkwan Univ. Branch
Seoul, South Korea

Recruit New Members, Participate in Representative Assembly as a President / DEC 2016-JUL 2017 <u>Provide Programming Educations</u>, Lead Projects as a Tutor / MAR 2016-DEC 2017

JAN 2017-FEB 2017

Winterails Code Study Leader Seoul, South Korea

Created, Gathered members and Led Ruby on Rails, JavaScript, PostgreSQL code study

EXTRACURRICULAR ACTIVITIES

OCT 2017-JUN 2018

Volunteer work, Gangnam District Office Seoul, South Korea

Provided programming education for poor family elementary school students

INTERESTS

Has a blind cubing as a bucket list.

Travels world to play a card game. (Earned a prize that worth \$5000 at a tournament held in Japan)