Seunggyun Han

Email: s.han@nyu.edu   Phone: +1-929-213-0782
Github: github.com/aete   Linkedin: linkedin.com/in/seunggyunhancodes   Portfolio: han.codes

Education

Master in Applied Urban Science & Informatics, New York University | Brooklyn, NY
- Merit-based Scholarship (2019 ~ 2020)

Master of Science in Engineering, Sungkyunkwan University | Suwon, Korea
- Sponsored by the Korean Government (Ministry of Land, Infrastructure, and Transport)
- SKKU Scholarship (2017 ~ 2019)

Bachelor of Architecture, Sungkyunkwan University | Suwon, Korea
- National Scholarship for Science and Engineering (2014 ~ 2016)

Work Experience

Researcher, Sungkyunkwan university Smart Green City Lab | Suwon, Korea, 2016 ~ 2019
- Performed qualitative and quantitative research regarding smart city policy and urban design projects
- Analyzed urban innovation, smart district design cases for improvement of smart city policies in South Korea
- Established preliminary urban design guidelines for the Incheon International Airport expansion and renovation and Jamsil Olympic Park in South Korea

Projects

Monitoring COVID-19 in US Metropolitan Areas | May. 2020 ~ Present
- This project aims to measure the impact of road construction work zones on traffic accident
- Built the front-end part of the project website and data dashboard

Work Zone Interagency Traffic Data Modelling and Analysis | Feb. 2020 ~ Present
- This project aims to measure the impact of road construction work zones on traffic accident
- Analyzed and processed the vehicle collision, 511 Event, and LION single street dataset with Python
- Designed and built a prototype of the web dashboard using Mapboxgl and d3.js

JC Make it Green Dashboard | Oct. 2019 ~ Dec. 2019
- This project was for building a dashboard to identify census tracts that have a poor green environment and high impacts on the sewer overflow in Jersey City
- Designed and built a prototype of the web dashboard using Mapboxgl and d3.js (han.codes/jc-dashboard)

Starbucks Capstone Challenge in Udacity Data Scientist Nanodegree | Oct. 2019
- This project is for Starbucks Capstone Challenge in Udacity Data Scientist Course
- Built recommendation system for the company about 'which offer will be most effective for a specific customer' with Scikit-learn, Light-gbm, and Xgboost

Research on Case Studies for Seoul Smart Urban Regeneration | Jul. 2018 ~ Oct. 2018
- This research aimed to suggest the direction of the Seoul smart urban regeneration policy and provide urban innovation and smart city project cases supporting that direction
- Analyzed innovation cases regarding urban problems in Seoul's low-rise residential area and urban manufacturing

Incheon International Airport Terminal 2 Concept Plan | Jan. 2018 ~ Jun. 2018
- This project was for establishing preliminary design guideline for the renovation and expansion of the airport
- Established design guidelines of places in the airport based on the previous concept plan

Concept Plan for Jamsil Olympic Trade Park | Jan. 2018 ~ Jun. 2018
- Established drawings and graphic works including the district masterplan, diagrams, report, and presentation slides
- Analyzed existing convention district cases regarding urban design and smart technologies

Dwelling by Walling | Jun. 2016 ~ Jul. 2016
- Design Proposal for a new concept of the residential house consisted of flexible walls
- Established architectural drawings of the house and detailed drawings for flexible walls

Skills

Data Analytics

Python (Numpy, Scikit-learn, Pandas, Geopandas, Tensorflow, Matplotlib, Seaborn), Javascript (D3.js, Mapboxgl.js, plotly.js), ArcGIS, QGIS

Front-end Web Design

HTML, CSS, Javascript

Awards & Honors

Excellent Research Award

12th International Symposium on Architectural Interchanges in Asia, 2018

Bronze Award

Gyeonggi Architecture Culture Festival, 2016

Recognition for Excellent graduation

Urban Design Institute of Korea, 2016

Design Excellence Award

Sungkyunkwan University, 2016

Excellence Award

GS Caltex Idea Competition, 2013

Publications

A study on change in the neighborhood planning for the adoption of autonomous vehicle

Master Thesis, Sungkyunkwan University, Feb. 2019

A study on plan generation deep learning model using DCGANs

12th International Symposium on Architectural Interchanges in Asia, Oct. 2018

A study on the concept strategy of urban regeneration with airport planning

Fall Academic Conference of Urban Design Institute of Korea, Nov. 2017

Training/Certification

Udacity Nanodegree:

Business Analyst, Data Science, Computer Vision, Deep Learning, AI Programming with Python, Data Foundation, Business Analyst, Front-end Web developer

Coursera Certificate

AI for Everyone, Applied Social Network Analysis in Python, Information Visualization: Programming with D3.js