Suqi HUANG

+852 68104217 || s7huang76@gmail.com
Portfolio: https://s7huang.github.io

Skilled in using data science, geospatial technologies, and development methodologies to facilitate climate change mitigation, public policy making and business development. More than 2 years of experience in assessing the value of urban renewal projects and building business perspective through commercial real estate project cooperation. I have excellent learning, analytical and communication skills, and can work in a high-intensity environment. Currently looking for a challenging career opportunity in the field of data analytics.

EDUCATION

09/2021 - Now **Master of Urban Analytics, The Univerty of Hong Kong** Hong Kong SAR

- Relevant Courses: Foundations in Data Analysis, Globalization and Regional Development, GIS, Spatial Mobilities Analytics, Science of Cities, Big Data Analysis, Programming and AI for Future Cities

09/2013 - 06/2018 **Bachelor of Architecture, China University of Mining and Technology** Xuzhou, Jiangsu, China

SKILL

Programming: Python || Machine Learning (scikit-learn) || Deep Learning (TensorFlow, Pytorch) || SQL

Software: Tableau || ArcGIS Pro || AutoCAD || Microsoft Office || Adobe Photoshop, Illustrator, InDesign

Language: English (Proficient) || Mandarin (Native)

DATA ANALYTICS PROJECT (More Details at https://s7huang.github.io)

01/2022 - 05/2022 **Integrating Solution of Transforming Tai Po into Water Resilience Town**

- Applied quantitative analysis and reclassification (***ArcGIS***) to assess stormwater management capacity and visualized (***Tableau***) the result of 100+ questionnaires which surveyed people's perception of flooding issues.
- Developed a design toolbox to integrate improvement approaches for surface runoff control. And achieved the evaluation target by increasing the permeable surface rate to 50% (previous 19.5%) along the river edge in Tai Po as a demonstration to the design company and government department.
- Created the dataset and trained a computer vision model U-net (***Python, TensorFlow***) to identify 12 city typologies from satellite images, enhancing the reproducibility of toolbox.

04/2022 - 05/2022 **Analysing Driving Factors of Land Value Based on Big Data in New York**

- Conducted data wrangling (unified geographic units, removed irrelevant values, filled missing values, etc.) through ***Python*** based on data from various sources and integrated dataset with 32326 rows x 505 columns.
- Built machine learning model through ***Python*** (***scikit-learn, Pytorch***) for evaluation, including MLR, KNN, Multilayer Perceptron, GBDT and Random Forest, which has the best performance with 0.887 in R^2.
- Reduced the MSE of models with an error maximum decreased by 23.28% through selecting 60 important features and archived 0.910 in R^2 of Random Forest after parameter optimization and RFE.

10/2021 - 12/2021 **Assessing the Future Development Value of Kwun Tong as CBD2**

- Compared the destination attractiveness to workers of the 18 districts through utility model based on the job opportunity and travel time cost (***Neo4j, Google Maps Distance Matrix API***). Revealed the position of Kwun Tong with ranking 4th in attractiveness and proposed strategies to further enhance the connection to CBD.
- Analysed the cause of Kwun Tong's outflow tendency through spatial analysis (***sDNA***) and GFA comparison (***Tableau***), as well as detected the areas that should be improved to provide solutions for government planning.

WORK EXPERIENCE

05/2020 - 07/2021 **Architect, SEED Architectural Design** Shenzhen, Guangdong, China

- **Urban Renewal Project Value Assessment —** Involved in the urban renewal project in Shenzhen, responsible for analysing the market position, estimating value, and writing corresponding study reports.
- **Energy Efficient Design Optimization —** Responsible for the facade design of the exhibition centre and cooperated with the curtain wall engineer to optimize the energy efficiency design.

07/2018 - 03/2020 **Assistant Architect, Tianhua Architectural Design** Shenzhen, Guangdong, China

- **External Communication and Presentation —** Collaborated with the engineer and consultant on the renovation project around Shenzhen Airport, reported projects, and provided related solutions to government departments and other stakeholders.

PRESENTATION

06/2022 **"Explorations in the Applications of Urban Analytics", CUSUP X Geospatial Lab** Hong Kong SAR

- Demonstrating the innovative solution of transforming Tai Po into water resilience town