NICHOLAS KO

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EDUCATION

YALE-NUS COLLEGE   Singapore
Bachelor of Science, Data Science Major   2020 - 2024
- Languages: Python, R.
- Proficiencies: QGIS.
- Relevant Coursework: Probability, Linear Algebra, Programming for Data Science, Introduction to Data Science, Introduction to Computer Science.
- Recipient of FM (Factory Mutual) Global Scholarship.

HWA CHONG INTERNATIONAL SCHOOL   Singapore
International Baccalaureate Diploma (40/45 Points)   2016 - 2017
HL: Math, Physics, History
SL: English Language and Literature, Chemistry, Chinese.
Extended Essay/Theory of Knowledge (A/B)

EXPERIENCE

YALE-NUS COLLEGE   Singapore
Research Assistant (Environmental Studies)   May 2021 - July 2021
- Performed exploratory data analysis on mangrove forest dataset of 5000+ plants.
- Analysed bootstrapped data to understand factors for forest regeneration.
- Created 3 heatmaps to compare difference between observed mangrove population and bootstrapped population.
- Constructed visualisations with R packages: 'ggplot2' , 'dplyr', 'vegan'.

PROJECTS

Migrant Worker Bus Travel Data   Oct – Nov 2022
- Analysed 15 million data points of origin-destination bus travel data.
- Created maps of travel and amenities around 10 migrant worker dorms in Woodlands in QGIS.

Covid-19 Policy Comparison   Sep – Nov 2022
- Used dynamic time warping to cluster 229 countries into 8 clusters based on Covid fatality metric.
- Visualised the policies between Indonesia and United Kingdom to find that their Covid policies were similar.

Covid-19 Policy Comparison   Sep – Nov 2021
- Applied SMOTE to balance and imbalanced dataset comprising of stroke/non-stroke patients.
- Applied K-nearest neighbor model that correctly identified 100% of stroke cases, 96% of non-stroke cases.

ADDITIONAL INFORMATION
- Languages: English (native), Cantonese (conversational), Singapore Sign Language (beginner)