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WORK EXPERIENCE

Singapore General Hospital (SGH) – Senior Data Scientist

Nov 20 – *present*

- Acted as “Technical Lead” and guided a team of 3 junior data scientists.
- Spearheaded the recruitment of interns and junior data scientists to further expand team capacity.
- Improved the identification of high-risk A&E inpatients at the point of admission by 10% using XGBoost.
- Successfully deployed the Prophet model to a local machine at RDC using PyInstaller as an interim deployment to allow the clinical team to improve the weekly manpower planning.
- Prepared production level Python codes to integrate and deploy developed Prophet model for RDC usage.
- Developed an ensemble model that predicts the occurrence of inpatient hypoglycemia in the next 24 hours given the information gathered in the past 24 hours with a precision score of 90%.
- Developed the guidelines and protocols for the newly built High Performance Computer Lab
- Led the evaluation of data science proposals and provided feedbacks to project leads to maximize value from predictive models.

Nanyang Technological University – Project Officer

Nov 18 – Nov 20

- Validated the results obtained by the latest state-of-the-art models by replicating the methodologies with Python.
- Improved the prediction of RNA flexibility property by 16% by developing a framework that utilizes topological data analysis and machine learning with R.
- Developed a framework that simulates multivariate financial data using Hidden Markov Model and Wasserstein Generative Adversarial Network (GAN).
- Innovated a new Maximum Mean Discrepancy GAN algorithm that is capable of generating financial data with imposed restrictions.

DB Schenker – Executive (Apple Finished Goods (FG) and Apple Care (AC))

Oct 16 – Oct 18

- Reduced annual domestic transportation cost by \$156,000 by optimizing daily FG trucks deployment.
- Reduced annual material cost by \$120,000 by identifying unnecessary material usage.
- Improved overall picking speed by identifying suitable fast-moving goods for placement in the automation lines.
- Reduced location utilization rate in AC from 95% to 85% by segregating and consolidating 10,000 SKUs by product category and velocity.
- Reviewed and updated all FG inbound and outbound SOPs to reflect the latest process flow since 2015.
- Mapped out end-to-end inbound and outbound process flow in AC to identify area of improvement and further streamline the process in the future.

EDUCATION

National University of Singapore (NUS)

Aug 19 – Jun 21

- Master of Science in Statistics

Nanyang Technological University (NTU)

Aug 12 – Jun 16

- Bachelor of Engineering (Chemical and Biomolecular Engineering)