Harry Chang

Portfolio: harrychangjr.streamlit.app
Github: github.com/harrychangjr

Email: harrychang.work@gmail.com
LinkedIn: linkedin.com/in/harrychangjr
Mobile: +65-8428-5869

EDUCATION

National University of Singapore — Singapore
Bachelor of Science - Data Science and Analytics — *Aug 2020 - May 2024 (Expected)*

Coursework: *Convex Optimization, Data Science in Practice, Data Structures and Algorithms, Data Visualization, Database Technology and Management, Linear Algebra, Multivariable Calculus, Optimization for Large-Scale Data-Driven Inference, Probability,, Regression Analysis, Statistical Learning*

SKILLS

- **Languages**: R, Python, SQL, Java, Stata, MATLAB
- **Machine Learning**: Scikit, NLTK, TensorFlow, Keras, JAX
- **Cloud and Database Systems**: MySQL, PostgreSQL, SQLite, BigQuery, GCP, AWS, Git, Docker
- **Data Visualization**: Numpy, Pandas, Matplotlib, Seaborn, ggplot2, Folium, Tableau, Power BI, Domo, Gephi
- **Design and Front-End**: Figma, Canva, Streamlit, HTML, CSS

EXPERIENCE

Sephora — Singapore
Product Data Analyst Intern — *Jun 2023 - Dec 2023 (Expected)*
- **Database Queries**: Built, documented and hosted SQL queries and processes to enable reproducible and effective pipelines, analysis and dashboards using BigQuery
- **Data Visualization**: Utilised Domo to create dataflows and visualizations that provide quick insights into product health and performance of e-commerce features (web and mobile)
- **A/B Testing**: Implemented A/B testing to measure potency of new e-commerce features before reporting results

SCOR — Singapore
Actuarial Intern — *May 2022 - Aug 2022*
- **Actuarial Analysis**: Performed actuarial analysis of reinsurance treaties in various APAC markets, including entry of client portfolio and loss data into xAct (treaty pricing system)
- **Insurance Market Databases**: Regularly updated and analysed risk profiles and claims databases for insurance markets in Pakistan, Thailand and Vietnam
- **Credit Product Pricing**: Trained machine learning models (logistic regression, random forest) to predict insurance claims, with an average accuracy of 80% for each model

Quest — Singapore
Data Analytics Intern — *Feb 2022 - May 2022*
- **Product Analytics**: Conducted cohort analysis to optimise user acquisition and retention rates
- **Growth Analytics**: Collected, analysed and interpreted trends within user data to improve company's growth and marketing strategies
- **Dashboard Processes**: Built visualizations and dashboards using RStudio and Tableau to report monthly key metrics of company's mobile application

PROJECTS

- **Enhanced TikTok Analytics Dashboard**: (Work in progress) Open-source dashboard for TikTok users to analyse performance (views, shares, likes & comments) of videos using hashtag analysis. Tech: Python, Streamlit, NLTK, Gensim, Plotly, Matplotlib & Seaborn. (May '23)
- **Optimising Article Quality with ChatGPT and Natural Language Processing**: Evaluated performance of ChatGPT in improving original write-ups of science news articles using NLP methods. Tech: Python, Streamlit, NLTK, Textstat & Matplotlib. (May '23)
- **Statistical Learning: Analysis on Video Game Sales**: Utilised various regression methods (random forest, XGBoost) and linear mixed-effects model to investigate effects of predictors in predicting global sales. Tech: R (Apr '23)
- **Statistical Learning: Nourish Your Body with Data**: Built matrix-factorisation based recommendation system to suggest healthier alternatives for grocery shoppers with varying demographics Tech: R, Python, Streamlit (Apr '23)

HONORS AND AWARDS

- First Runner Up out of 117 team submissions at NUS LifeHack 2022 - July, 2022
- First Runner Up at NUS Fintech Month Hackathon 2021 - January, 2021

ACTIVITIES

Co-founder and Publicity Head, NUS Product Club — Singapore
Spearheaded logo design and crafted publicity materials to promote outreach of new club — *Apr 2023 - Apr 2024*

Deputy Head of Finance, Google Developer Student Clubs NUS — Singapore
Compiled team budgets to ensure sufficient funding for workshops and hackathon — *Sep 2021 - Apr 2022*

Marketing Director, NUS Statistics and Data Science Society — Singapore
Secured $19,000 worth of sponsorships for 850 students in Data Analytics Competition — *May 2021 - Apr 2022*