

Harry Chang

Email: harrychang.work@gmail.com

Github: github.com/harrychangjr

Mobile: +65-8428-5869

Availability: 3 July to 8 December 2023

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

- 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
- Immigration@SG LLP** Singapore
Data Migration Intern Oct 2020 - Jan 2021
 - Data Cleaning:** Performed data cleaning of over 30,000 records using Excel and Pandas in Python to facilitate smooth data migration into new customer relationship management (CRM) systems
 - Customer Segmentation:** Derived customer segmentation models using machine learning techniques (regression, decision trees, market basket analysis) to improve company's marketing strategies
 - Time Series Analysis:** Completed time series analysis using past sales data to forecast future monthly revenue

PROJECTS

- PassionPassport:** Built and integrated web application with ChatGPT that utilises hobbies as inputs to recommend itineraries for overseas travel. Awarded Top 15 Finalist for NUS LifeHack 2023. Tech: Python, HTML, CSS, Firebase, Streamlit, OpenAI API, Folium, BeautifulSoup4. (Jun '23)
- Enhanced TikTok Analytics Dashboard:** Created 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 - 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

- Top 15 Finalist out of 141 team submissions at NUS LifeHack 2023 - June, 2023
- Theme Best (Safety) and First Runner Up (Overall) 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 President, NUS Product Club** Singapore
Spearheaded logo design and oversaw operations, partnerships and workshops of new club Apr 2023 - Apr 2024
- President and Marketing Director, NUS Statistics and Data Science Society** Singapore
Oversaw efforts of 56 club members in organising events and technical workshops May 2021 - Nov 2022
- 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