

Lee Gene Ee

Email: e0957537@u.nus.edu | Website: <https://gene2345.vercel.app>

GitHub: <https://github.com/gene2345>

EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE

Aug 2022 - May 2026

Bachelor of Science in Business Analytics

- Cumulative Average Point (CAP): 4.80 / 5.00
- Recipient of NUS Merit Scholarship
- Recipient of Canada-ASEAN Development Scholarship
- Awarded Dean's List AY23/24 Sem 2
- Relevant Modules (A+/A): Risk Analytics for Financial Services, Econometrics Modelling for Business Analytics, Application Systems Development for Business Analytics, Programming Methodology I & II, Data Management and Visualization, Mining Web Data for Business Insights

HWA CHONG INSTITUTION

Jan 2014 – Dec 2019

GCE 'A' Levels

- Grade: 90/90 UAP (7 Distinctions)
- Hwa Chong Outstanding Student Award
- Hwa Chong Students' Council Member

WORK EXPERIENCE

INCOME INSURANCE LIMITED *Data Analyst (Cybersecurity)*

May 2024 - Present

- Spearheaded development of automated structured data pipeline to consolidate cybersecurity logs into user-friendly dashboards for real-time insights.
- Collaborated with SOC team to combat cybersecurity threats by enhancing detection capabilities through Statistical and Machine Learning methodologies.
- Utilized K-means clustering, word embeddings and rule engines in DLP domain, resulting in up to 110% improvement in detection accuracy.
- Skills: Python, NLP, Clustering Models, Tableau, PowerBI, Power Automate, VBA, DAX

TRIDENTITY TECH *Business Analyst Intern*

Dec 2023 - May 2024

- Gathered and analyzed relevant data to create insightful dashboards to support decision making
- Implemented solutions for end-to-end automation for data collection and processing
- Collaborated closely with product managers to analyze market trends, create product roadmaps and document User Stories.
- Facilitated communication among cross-functional teams, translated business requirements into functional specifications for development teams.
- Skills: Python, PowerBI, SQL, R, Tableau, Google AppScript

NUS FINTECH SOCIETY *Machine Learning Tech Analyst*

Aug 2023 - May 2024

- Conducted research and utilized diverse machine learning strategies (BERT, LSTM, Random Forest, CNN, regression, Naive Bayes) to enhance fintech analytics at NUS Fintech Society.
- Applied web scraping skills using BeautifulSoup and Selenium for efficient data acquisition, contributing to comprehensive data sets for machine learning models.
- Medium Article: <https://medium.com/@gtg-llama/seachain-fake-financial-news-detection-ml-application-599a2bc12b5d>

SKILLS

- Languages: English, Chinese
- Frameworks: Keras, Pytorch, Scikit-learn, NLTK, Pandas, NumPy, Seaborn, Matplotlib
- WebDev Frameworks: ReactJS, VueJS, NodeJS, Firebase, MongoDB, SQL Alchemy, Flask
- Languages: Python, Java, SQL, R, JavaScript, HTML/CSS, Google Apps Script
- Others: Tableau, PowerBI, JIRA, GitHub, DAX, VBA, Agile Framework

PROJECT EXPERIENCE

Utilizing Graph Neural Networks for Social Bot Detection, Personal Project Jan 2024 - Present

- Submitted project paper under guidance by NUS to the Hawaiian International Conference on System Sciences (HICSS).
- Explored a novel approach and innovative architecture of Graphical Neural Networks (GNNs) for Social Bot Detection, aiming to mitigate evolving bot evolution techniques.
- Conducted an in-depth analysis of misclassified bots within the Twitter ecosystem.
- Link: https://gene2345.vercel.app/static/media/HICSS_Paper.3179fdb4914ad7f60215.pdf

Risk Analysis of Markets, Personal Project

Feb 2024 - Mar 2024

- Wrote a financial risk analysis paper focusing on the healthcare sector, evaluating both quantitative and qualitative risks associated with major firms including Pfizer, Amgen, and Merck.
- Utilized statistical techniques to analyze historical data, such as Parametric Value at Risk (VaR) and Expected Shortfall, as well as comprehensive back testing to assess potential financial exposures.
- Applied sophisticated portfolio optimization models such as the Black-Litterman model and Hierarchical Risk Parity to develop optimized investment strategies.
- Conducted a thorough analysis of performance metrics and risk parity, providing insights into the balance between expected returns and risk across various investment scenarios.
- GitHub: <https://github.com/gene2345/finModelling/blob/main/QualitativeAnalysis.ipynb>

OverEasy Financial Website, Personal Project

May 2023 - Aug 2023

- Developed a comprehensive investment tracking website using Python, Flask, Jinja, HTML, CSS, and SQL Alchemy.
- Implemented sentiment analysis through scikit-learn and NLTK to extract market sentiments from online text, improving user insights using NLP.
- Utilized web scraping tools BeautifulSoup and Selenium to gather intricate financial health data from various websites, providing valuable information for new investors.
- GitHub: <https://github.com/gene2345/OverEasyUpdatedv3>

Volunteer Connect, Personal Project

Jan 2024 - Feb 2024

- Developed VolunConnect, a comprehensive platform using ReactJS, Firebase, and NodeJS, facilitating event uploads for beneficiaries and volunteer participation.
- Implemented TF-IDF vectorization to offer personalized recommendations for users and utilized Natural Language Processing (NLP) techniques for feedback analysis, enhancing user experience.
- Integrated features enabling users to provide feedback and obtain certificates seamlessly within the platform.
- GitHub: <https://github.com/gene2345/h4gteam>

CO-CURRICULAR ACTIVITIES

EUSOFF EXPEDITIONS, Training and Development Head

Aug 2022 - Present

- Led the planning and execution of a two-week Overseas Community Involvement Program in Cambodia during the summer, focusing on impactful experiences and cross-cultural learning.
- Spearheaded local fundraising and carnival events for the Rare Disorders Society to promote community engagement and support.

EUSOFF HALL, Basketball Team

Jul 2023 - Present

- Navigated the art of drilling with style, nailed jump shots with pinpoint accuracy and practiced tenacious defense during biweekly training sessions and the Inter-Hall Competition
- Skills: Teamwork, Perseverance, Quick Thinking

EUSOFF HALL, Special Projects Team

Aug 2022 - May 2023

- Hosted Eusoff Hall Bash 2023 as emcee for 250 attendees.
- Organized various carnivals, night cycling events, and bonding activities for the entire hall community.
- Skills: Public Speaking, Time Management

HWA CHONG INSTITUTION, 45th Students' Council Member

Jan 2018 - Dec 2019

- Managed day-to-day welfare services for students, ensuring needs were met.
- Communicated with school governance bodies regarding student welfare issues.
- Led a team of 8 members to plan and ensure coordination and execution of Mid Autumn Festival
- Led the planning and execution of orientation events for approximately 1,200 students.