GEORGE JIEH

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EDUCATION

BrainStation   **September 2023 - May 2024**
Bootcamp, Data Science

University of California - Berkeley   **September 2010 - May 2020**
Bachelor's, American Studies

CERTIFICATIONS

Microsoft Certified: Azure AI Engineer Associate (Aug 2024 – Aug 2025), Microsoft Certified: Azure Data Scientist Associate (Jul 2024 – Jul 2025), Fundamentals of the Databricks Lakehouse Platform Accreditation (Sep 2024), Generative AI Fundamentals Accreditation (Sep 2024), Google Data Analytics Professional Certificate (Jan 2022), PCEP – Certified Entry-Level Python Programmer (Sep 2022), WSET Level 2 (May 2023), WSET Level 1 (Nov 2021), 1-66 Uniform Combined State Law Examination aka Series 66 (Dec 2020), General Securities Representative Exam aka Series 7 (Oct 2020), Securities Industry Essentials Exam aka SIE (Sep 2019)

PROFESSIONAL EXPERIENCE

Scale AI   **Remote**
Freelance AI/ML Engineer & Quality Analyst   *August 2024 - Present*
- Optimized Large Language Models for code generation, NLP, and domain-specific tasks by integrating prompt engineering and fine-tuning techniques, improving model reliability for enterprise clients.
- Executed multi-language code reviews (Python, JavaScript, SQL) to ensure efficiency, security, and compliance, feeding these insights back into LLM refinement cycles.
- Evaluated AI-generated outputs vs. human annotations using human-in-the-loop pipelines (RLHF), identifying bias and error patterns to enhance LLM performance.
- Maintained open communication with stakeholders, delivering high-quality, on-time releases under tight deadlines.

Merrill Lynch   **San Francisco, CA, USA**
Registered Client Associate – Officer   *April 2020 - Present*
- Conducted data-driven market analyses to assist Financial Advisors, leading to a 15% rise in client satisfaction.
- Collaborated with cross-functional teams, ensuring seamless operational workflows and a 25% boost in client retention.
- Worked closely with a small team, fostering a collaborative environment essential for cross-functional teamwork, which improved team efficiency by 10% and ensured seamless client service continuity.

Bank of America   **Berkeley, CA, USA**
Customer Service Representative – Officer   *June 2016 - April 2020*
- Supervised Client Service Representatives and handled client de-escalation, demonstrating the ability to analyze
- situations, identify issues, and implement effective solutions, leading to a 50% reduction in escalated cases and a 60% improvement in resolution time.
- Trained new employees, emphasizing the importance of operational tasks and client interaction, which resulted in a 30% increase in employee cross-selling.
- Provided a positive client experience by quickly connecting clients to appropriate resources and educating them on self-service technologies, resulting in a 10% increase in self-service adoption and a 30% improvement in client feedback
- scores.

Three Bards Entertainment   **Remote**
Co-Founder & Vice President   *June 2009 - June 2016*
- Oversaw financial operations, securing $100k in startup capital and raising $20k in Kickstarter funding in the first week
- Conducted market research in the gaming sector, driving a 50% surge in targeted traffic.

PROJECTS & OUTSIDE EXPERIENCE

Bikeshare Analysis

- Developed an ETL pipeline to process 196,465 bike-share trips, utilizing R, Excel, and PostgreSQL for data cleaning and transformation.
- Engineered custom SQL functions to perform advanced statistical analyses, including median calculations and ride pattern assessments.
- Designed and implemented data visualizations using ggplot2 in R and Tableau, uncovering key insights into user behavior patterns.
- Applied the Haversine formula to accurately compute trip distances from geographical coordinates.
- Conducted comprehensive statistical analyses, encompassing time series evaluations, seasonal pattern identifications, and user segmentation.
- Developed interactive Tableau dashboards to effectively communicate key metrics and trends to stakeholders.
- Leveraged data-driven insights to identify high-potential customer segments for membership conversion strategies.
- *Link to project*

Google Companion
- Led the development of a route safety assessment algorithm, integrating data analytics to assign safety scores to various paths, thereby enhancing user trust in AI-driven navigation solutions.
- Utilized data analysis techniques to identify key risk factors affecting route safety, informing the weighting system within the algorithm.
- Collaborated with a multidisciplinary team to ensure the algorithm's seamless integration into the application, contributing to a user-friendly interface that effectively communicates safety insights.
- Contributed to the project's success, resulting in a first-place win at the Google-sponsored BrainStation hackathon.
- *Link to project*

Bellabeat Analysis
- Conducted a comprehensive case study to analyze public Fitbit data, providing strategic business recommendations for Bellabeat, a wellness technology company.
- Utilized R programming for data cleaning, transformation, and analysis, ensuring accurate and reliable insights.
- Employed PostgreSQL to manage and query large datasets, facilitating efficient data manipulation and retrieval.
- Developed interactive Tableau dashboards to visualize user activity patterns, sleep trends, and other key health metrics, enhancing data-driven decision-making.
- Identified user behavior trends through statistical analysis, offering actionable insights to inform Bellabeat's product development and marketing strategies.
- *Link to project*

Air Traffic Analysis
- Developed a comprehensive analysis of U.S. domestic air traffic data to evaluate investment opportunities among major airlines.
- Utilized MySQL for in-depth data exploration, examining metrics such as flight volumes, delays, cancellations, and overall airline performance.
- Created interactive Tableau visualizations to effectively communicate findings, highlighting trends and patterns to support data-driven investment decisions.
- Synthesized insights to identify the most promising airline for potential investment, based on comprehensive data analysis and visualization.
- *Link to project*

FreshRSS Financial News Analyzer
- Created a Python-based pipeline to fetch and parse FreshRSS articles, then analyze financial sentiment via OpenAI or local Ollama LLM models.
- Integrated auto-shutdown on high RAM usage to safeguard system resources and introduced multi-language support for sentiment summaries.
- Produced structured Markdown reports of stock tickers, sentiment, and market implications to aid day-to-day investor decisions.
- *Link to project*

Vineyard Prediction Webapp
- Built a custom Selenium scraper for Wine Enthusiast, merging climate data from Bing/WWO APIs to forecast optimal grape varietals.
- Applied exploratory data analysis and machine learning to determine vineyard suitability based on historical climate.
- Developed a Flask front-end for address-based predictions, offering a user-friendly interface.
- *Link to project*

West Nile Virus Study
- Conducted an in-depth analysis of West Nile Virus (WNV) prevalence in Chicago, utilizing mosquito tracking data from 2008 to 2019.
- Engineered predictive models to forecast mosquito populations and WNV presence, employing machine learning techniques to support public health planning and mosquito control strategies.
- Integrated diverse datasets, including mosquito counts, trap types, WNV occurrence, and geographical information, to identify key factors influencing WNV spread.
- Developed data visualizations to effectively communicate findings and facilitate data-driven decision-making for public health initiatives.
- *Link to project*

MTG AI Deck Builder
- Currently still work in progress.
- Developing an AI-driven system to generate competitive Magic: The Gathering (MTG) Standard decks by analyzing tournament data and card information.
- Implementing unsupervised learning algorithms to identify novel card synergies and archetype strategies within the evolving MTG meta.
- Integrating the Scryfall API to access comprehensive card data, enabling real-time analysis and deck optimization.
- Designing a dynamic model that adapts to meta shifts, ensuring the AI remains relevant and effective in deck generation.
- Collaborating with the MTG community to refine AI-generated decks, incorporating player feedback to enhance performance and creativity.
- *Link to project*

SKILLS

Skills: Python, MySQL, Bash, Apache Spark, Hadoop, AWS, Microsoft Azure, Docker, Kubernetes, Tableau, Seaborn, Excel/Numbers/Sheets, Selenium, Flask, Keras, Tensorflow, Pytorch, Market Research, Prompt Engineering, Scikit-learn, Docker, Kubernetes, Matplotlib, RLHF, Git, Data Science, Data Structures & Algorithms, Machine Learning, Agile, BigQuery, Business Analytics, Customer Service, Data Analysis, Databricks, Google Cloud Platform, Google Analytics, Google AdWords, Jupyter, Linux/Unix, LLM, MATLAB, Natural Language Processing (NLP), Neural Networks, NumPy, OpenCV, Pandas, Postgres, PowerPoint/Keynote/Slides, PowerShell, R, Reinforcement Learning, REST APIs, Salesforce, SQL
Languages: Mandarin
Interests: Fine wine (winemaking & tasting), history, advanced investment research, board & card game strategy (MTG, Android Netrunner), video game development, music (guitar/violin/clarinet), rock climbing, golf, exploring emerging tech (crypto & quantum computing), collectible investing