YIHAN ZHOU

San Francisco, CA ◇ (+1)510-679-9036 ◇ yihan.zhou427@gmail.com ◇ LinkedIn ◇ GitHub ◇ Profile

PROFESSIONAL SUMMARY

Applied Data Scientist and AI Engineer specializing in end-to-end analytics, machine learning, and AI-enabled decision-support systems. Translates ambiguous business challenges into production-ready solutions with measurable impact.

Expertise: Applied Machine Learning ◇ Statistical Modeling ◇ Decision-Support Systems ◇ Analytics Product Development ◇ End-to-End Data Pipelines ◇ Production ML ◇ Client-Facing Analytics ◇ Executive Communication

PROFESSIONAL EXPERIENCES

Data Scientist *Sep 2025 - Present*
McKinsey & Company *San Francisco, CA, U.S*

- **WorkforceAI Automation Insights Platform**: Architected an end-to-end platform that maps client HRIS data to external job taxonomies and automation benchmarks, automating activity-level productivity analysis and slide-ready PowerPoint outputs; adopted by **20+ enterprise clients** and generated **$80K+** in revenue
- **Strategic Workforce Planning Forecasting Engine**: Built scalable workforce demand and supply forecasting workflows with flexible scenario assumptions, API-driven integration of industry benchmarks, and a *SQL*-based analytics agent; generated **$140K** in client project revenue
- **AI-Driven Taxonomy Mapper**: Engineered and deployed an *LLM-powered* job mapping system to standardize fragmented role data into structured taxonomies via *RAG* and *prompt optimization*, achieving $>$ **90% accuracy** and $>$ **0.70 F1**

Data Scientist, Research & Development *Jun 2025 - Aug 2025*
Gotion Inc. *Fremont, CA, U.S*

- **Predictive ML Pipelines**: Built production-ready pipelines and feature engineering workflows to predict battery grading capacity and resistance at early manufacturing stages, enabling **immediate grading evaluations**
- **Multi-stage XGBoost Modeling**: Developed a hierarchical modeling approach combining classification-based segmentation, segmented regression, and post-prediction calibration, achieving 100% of predictions within 1% absolute relative error and 92.6% within 0.5%, with results contributing to **2 submitted patents** and **2 peer-reviewed publications**
- **Cost Optimization**: Delivered significant operational impact, saving **$500K per GWh**, reducing grading time **from 6 hours to 0**, and increasing battery throughput by **32%**

Data Engineering Intern (Large Model Division) *May 2024 - Aug 2024*
SenseTime *Beijing, China*

- **Generative AI System**: Designed a text-to-poster generation pipeline converting user prompts into production-quality visual assets; **reduced operational costs by 78%** and forecast **300K+ user growth**
- **Automated Data Harvesting**: Built a *Python Selenium*-based pipeline to collect 1,000+ PDF training assets, **lifting LLM model precision by 13%**
- **LLM Benchmarking**: Implemented an automated evaluation framework via *GPT APIs* and persona testing; boosted satisfaction from **20% to 70%** through strategic model fine-tuning

Data Engineering Intern (Data Group, Excellent Intern) *Feb 2024 - May 2024*
ZhuoShi Fund, Financial Services Hedge Fund *Beijing, China*

- **Trading Data Infrastructure**: Built *production-grade* data pipelines for quantitative trading systems, standardizing **24 years** of Hong Kong Exchange data and detecting **175+ data anomalies** to ensure reliable downstream decision-making
- **Multi-Exchange Scraper**: Automated daily settlement parameter scraping from **6 exchanges** by creating a scalable data extraction pipeline, allowing flexible querying by exchange, data, and time period
- **Data Governance Automation**: Streamlined data governance and **saved 7+ hours weekly** for the trading team through automating metadata management with *DataHub*, *Git* and *Airflow*, enhancing data lineage visualization

EDUCATION

Master of Analytics - University of California, Berkeley *Sep 2024 - Aug 2025*
Industrial Engineering and Operations Research GPA: 4.00/4.00 (Top 1%)
Awards: Excellence in Student Leadership Award

Bachelor of Science & Engineering - Tsinghua University *Sep 2020 - Jun 2024*
Mathematics and Physics, Civil Engineering and Systems Major GPA: 3.88/4.00 (Top 20%)
Awards: Outstanding Graduate, Outstanding Students' Leader, Excellent A-class Comprehensive Scholarship