Roy Ma

Citizen Data Scientist

[roy.ma9@gmail.com] · [linkedin] · Manassas, VA 20110

Citizen Data Scientist with 4 years of applied data engineering and 10 years in finance. Hands-on with production-grade ETL and machine learning for legal, tax, and financial domains. Owned pipelines powering capital reconciliations, jurisdictional forecasting, and entity workflows. Built audit-ready systems leveraging GCP, AWS, Airflow/Composer, Spark, and dbt. Designed statistical experiments and deployed ML/DL solutions using Scikit-learn, PyTorch, and TensorFlow. Experienced with LLM workflows (RAG, fine-tuning) using LangChain, Transformers, and SageMaker. Skilled in data storytelling and stakeholder communication via Tableau. Core technical toolkit includes Python, SQL, Git, and Docker. Coached internal teams on adopting data-driven workflows to support critical business decisions. Does not require U.S. visa sponsorship.

Professional Experience

Citizen Data Scientist, SSR (守税人) 2020 to 2025, Beijing, China

- Owned ETL lifecycles driving regulatory reporting, entity workflows, and capital reconciliations; automated high-risk, time-sensitive deliverables using GCP,
 BigQuery, Composer/Airflow, and Spark/PySpark, eliminating manual errors and enabling reusable pipelines.
- Developed and deployed machine learning and deep learning logic using Scikit-learn,

 PyTorch/TensorFlow to classify transactions, estimate positions, and forecast

 jurisdictional exposure; reduced client validation cycles by 10+ hours per engagement.
- Translated domain expertise from legal, finance, and tax teams into scalable data logic; deployed internal tooling and dashboards via Snowflake, Tableau, and Docker, reducing rework tickets by 40%.
- Designed validation, monitoring, and audit layers for production pipelines to ensure reliability, traceability, and reproducibility across systems.
- Coached non-technical stakeholders on internal tooling, integrating data-driven workflows into advisory pipelines and client-facing deliverables.

Director of Business Development, Cleveland International Fund 2017 to 2019, Cleveland, OH, U.S.

- Directed investor relations for a portfolio of 300+ institutional and private investors, overseeing investor reporting, capital calls, and regulatory compliance with meticulous attention to data accuracy and transparency.
- Raised \$250M+ in direct capital commitments, personally originating and closing repeating deals with 35+ key LPs, and leading capital formation strategies through fund marketing and roadshows, sourced and secured commitments from 60+ new investors.
- Synthesized complex market data and financial models into clear, actionable narratives, delivering high-impact storytelling to investors and senior leadership.

Head of International Department, MultiBank Group 2016 to 2017, Beijing, China

- Oversaw a 26-member international department, directing business development, account management, and international operations strategy for a 350+ employee global brokerage.
- Generated \$8B+ in daily trading volume, managing 120,000+ active global retail clients and personally overseeing 50+ key wealth management clients, with \$400M+ in assets under management.

- Directed global marketing, integrating predictive analytics via machine learning to drive targeted client acquisitions and optimize incentive programs, resulted in \$120M+ in YoY incremental revenue.
- Improved Salesforce CRM, personally contributing custom codes that enabled smart client segmentations, precise lead scoring, and targeted marketing campaigns.
- Owned departmental KPI setting, performance evaluations, and reporting directly to the CEO, with full authority over recruitment, team expansion, and operational oversight.

Projects

Kaggle Competitions Expert, top 0.8%

LLMs - You Can't Please Them All (Silver Medal, Ranked Top 3%)

- Designed and implemented LLM prompt optimization pipelines using LangChain for workflow orchestration, Transformers for model interfacing, and scikit-learn for performance analysis.
- Addressed critical business challenges in LLM reliability and prompt tuning workflows automation, reducing manual prompt engineering cycles, improving accuracy-to-cost ratio in enterprise-scale LLM deployments.

Santa 2024 - The Perplexity Permutation Puzzle (Bronze Medal, Top 5%)

- Developed and applied optimization algorithms, including evolutionary strategies and gradient descent methods, to solve complex black-box search problems in natural language processing tasks.
- Demonstrated a structured approach to solving open-ended problems, translating complex algorithmic results into actionable insights and scalable solutions for real-world business decision-making.

Education

Master of Liberal Arts, Data Science, Harvard Extension School (In Progress) MicroMasters, Statistics and Data Science, MIT Professional School Bachelor of Arts, Economics, University of Maryland Baltimore County

Languages and Certificates

English - Native, Mandarin - Native, Japanese - Business Conversational
FINRA Series 63 - Uniform Securities State Law
FINRA Series 82 - Private Securities Offerings Representative
U.S. National, Does not require U.S. visa sponsorship

[Codes] · [Kaggle] · [Github]