# Roy Ma

### Citizen Data Scientist

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Citizen Data Scientist with 4 YoE in applied data engineering and 10 YoE in finance, hands-on in production-grade ETL, regulatory reporting, and machine learning modeling for legal, tax, and financial operations. Owned pipelines and internal tooling that powered entity workflows, capital reconciliations, and jurisdictional forecasting for institutional clients. Designed audit-ready systems using AWS, Airflow, dbt, Snowflake, and deployed ML/DL solutions with Scikit-Learn, PyTorch, and TensorFlow. Delivered stakeholder-facing dashboards with Metabase and Docker, and coached internal teams on technology adoption to support data-driven decisions across business workflows. Do not require sponsorship.

### Professional Experience

Citizen Data Scientist, SSR (守税人) 2021 to 2025, Beijing, China

- Owned ETL pipelines, driving regulatory reporting windows, entity workflows, and capital flow reconciliations; automated time-sensitive and high-risk processes for client deliverables using AWS, Airflow, dbt, enabling reusable workflows and eliminating manual reconciliation errors.
- Deployed machine learning logic using Scikit-Learn, PyTorch, and Tensorflow to classify transaction types, estimate position values, and forecast jurisdictional metrics; reduced turnaround time for validations by 10+ hours per client.
- Abstracted domain expertise from legal, finance, and tax teams into scalable data logic, deployed internal toolings and dashboards via <a href="Snowflake">Snowflake</a>, <a href="Metabase">Metabase</a>, and</a>
   Docker
   reducing rework tickets by 40% and accelerating decision cycles by 1-2 days.
- Designed validation, monitoring, and audit layers across production pipelines to ensure reliability, traceability, auditability, and reproducibility.
- Mentored team members and stakeholders on internal toolings, integrating them into advisory workflows, and data-backed client decisions.

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

## Certificates and Languages

English - Native, Mandarin - Native, Japanese - Business Conversational
FINRA Series 63 - Uniform Securities State Law, FINRA Series 82 - Private Securities
Offerings Representative

[Codes] ⋅ [Kaggle] ⋅ [Github]