

Resume

M. O.

As of June 2025

1 Career Summary

| Period | Role / Description |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Mar 2024 – Present | eFX Quant Manager , Mega Bank (Electronic Foreign Exchange) |
| Jun 2022 – Present | Founder / Representative , Quant Marketing Lab (Overseeing DX and Marketing Infrastructure Development for the Recruitment Industry) |
| Jun 2019 – Feb 2024 | Equity Derivatives Quant , Major Securities Firm |
| Apr 2018 – May 2019 | Mid-Office Quant / System Developer , Consulting Firm |
| Apr 2015 – Mar 2018 | Research Fellow (DC1) , Japan Society for the Promotion of Science (JSPS) @ The University of Tokyo Graduate School |
| Apr 2014 – Mar 2015 | Researcher , Institute for Solid State Physics (ISSP), The University of Tokyo (LASOR Center) |

2 Technical Summary

- **Programming Languages:** Python (Pandas, NumPy, scikit-learn), Java, SQL, VBA, Shell Script
- **Platforms & Tools:** Tableau, Looker Studio, Git, JIRA, Docker
- **Cloud Services:** AWS (EC2, Lambda, Batch, S3, Bedrock), Google API (Gmail, Calendar, Gemini API), OpenAI API
- **Databases:** Microsoft SQL Server, PostgreSQL, kdb+ q database
- **Financial Engineering:** Derivatives Valuation (Barrier/Exotic Options/Equity-linked Structured Notes), Least Squares Monte Carlo (LSM), Black-Scholes Model (and extensions), Automated Position Reconciliation Models
- **Machine Learning:** Deep Learning (PyTorch), Transformer Models (BERT derivatives), Time Series Analysis (Anomaly Detection, ARIMA, GARCH), Feature Engineering (Technical Indicator Development), SVM, Clustering Analysis

3 Work History

- **Mar 2024 – Present: Mega Bank / eFX Quant Manager:** Deployed global market-making strategies (Tokyo/London); Built automated spread optimization infrastructure (AWS/Docker); Automated real-time execution reporting using Generative AI (Bedrock/OpenAI); Developing toxic flow risk algorithms; Oversaw pricing and sales support.

- **Jun 2022 – Present: Quant Marketing Lab (Proprietorship) / Founder / Representative:** Led DX/Quant infrastructure build-out for recruitment business (AI utilization); Developed PyTorch/RNN-based (BERT etc.) advanced data analysis and marketing prediction models, supporting business growth.
- **Jun 2019 – Feb 2024: Major Securities Firm / Equity Derivatives Quant:** Managed exotic derivatives execution system (data schema, fair value); Automated structured note trading/cover trades via LSM; Developed front/middle position reconciliation batches; Handled system management (automated scheduler).
- **Apr 2018 – May 2019: Consulting Firm / Mid-Office Quant / System Developer:** Implemented FRTB regulatory compliance system; Automated testing procedures.
- **Apr 2015 – Mar 2018: The University of Tokyo / Research Fellow (DC1), JSPS:** Authored 4 peer-reviewed international journal papers (including first authorship).
- **Apr 2014 – Mar 2015: The University of Tokyo - Institute for Solid State Physics (ISSP) / Researcher (LASOR Center):** Conducted femtosecond time-resolved photoelectron spectroscopy experiments and numerical simulations.

4 Qualifications and Licenses

| Date | Qualification / License |
|----------|-----------------------------------------------------------------------------------|
| May 2008 | Driver's License (Standard) |
| Apr 2010 | Practical Mathematical Skills Test (Su-Ken) - Grade 1 |
| Feb 2012 | Large Motorcycle License |
| Jul 2015 | Passed National Civil Service Examination (Comprehensive Track, formerly Class I) |
| Jul 2016 | Same (Consecutive Pass, List Renewal) |
| Apr 2018 | IT Passport (During New Hire Training) |
| Apr 2018 | TOEIC Score 765 (During New Hire Training) |
| May 2019 | Securities Sales Representative License, Class I |
| Jul 2019 | Japan Securities Dealers Association (JSDA) Internal Management Supervisor |
| Jan 2020 | Deep Learning G-Test |
| Oct 2021 | Business Law Proficiency Test - Grade 3 |
| Feb 2022 | Business Accounting Proficiency Test - Grade 3 |
| Oct 2022 | Financial Planner (FP) - Grade 3 |
| Feb 2023 | Marketing Proficiency Test - Grade 3 |
| Apr 2024 | NFA Swaps Proficiency Requirements (Long Track) |

5 Education

- (2025 – Present): MBA, Graduate School of Business Administration, Entrepreneurship Program
- (2018 – 2018): UCLA Anderson School of Management (Completed Financial Engineering MBA Course, Class Representative)
- (2015 – 2018): Ph.D. Program, The University of Tokyo Graduate School (JSPS Research Fellow DC1)
- (2012 – 2014): Master's Program, The University of Tokyo Graduate School