



**Mario Sato**  
Data Scientist  
Financial AI, CNN, RL  
Master in Computer Science  
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👤 GitHub Profile  
🌐 LinkedIn Profile

## EDUCATION

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- **University of Tsukuba** Nov/2021 - Mar/2024  
*Master's in Computer Science*
- **INSPER - Institute of Research and Education** Jul/2015 - Jun/2019  
*Undergraduate in Business Administration*

## TECHNICAL SKILLS AND INTERESTS

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**Languages:** Python, SQL, C++  
**Developer Tools:** Git, Pytorch, Tensorflow, OpenCV, Streamlit, Docker, Snowflake, DataRobot  
**Systems:** Mac, Linux, Windows  
**Soft Skills:** Financial Knowledge, Consultant skills, Intercultural Experience  
**Areas of Interest:** Financial AI, CNN, Reinforcement Learning  
**Languages:** Japanese (Fluent), English (Fluent), Portuguese (Native)

## EXPERIENCE

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- **AlpacaTech Co.** Jun/2023 - Now  
*Data Science Intern → Data Scientist* Tokyo, Japan
  - Optimized a Reinforcement Learning model by customizing policy structures and reward configurations to enhance trading performance.
  - Developed and automated a visual reporting system for daily financial transactions, improving client insights and decision-making.
  - Conducted research on price forecasting models, leveraging state-of-the-art AI techniques in financial time series analysis.
- **University of Tsukuba** Apr/2022 - Mar/2024  
*Research Assistant/Teaching Assistant* Tsukuba, Ibaraki
  - Designed a methodology for estimating tomato plant Leaf Area Index using CNN and Image Processing techniques.
  - Served as a Teaching Assistant for courses including Information Science and Introduction to Programming.
- **Global Link Consultoria** Jun/2020 - Oct/2021  
*Consultant* Sao Paulo, Brazil
  - Led the turnaround of a well-known restaurant in São Paulo, successfully restoring operations and financial stability amid the COVID-19 crisis.
  - Developed and implemented a digital marketing and sales strategy, driving revenue growth and enhancing customer engagement.
- **Modelos de Negocio Consultoria** Oct/2018 - Mar/2020  
*Intern → Consultant* Sao Paulo, Brazil
  - Provided strategic guidance on implementing a new management culture at one of Brazil's largest waterproofing companies.
  - Developed and deployed automated document generation systems across multiple departments.

## RESEARCH/PROJECTS

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### –Awards

*Awards obtained in academy*

- \* 2nd place in Semiconductor Manufacturing Fab Data AI utilization Idea Contest. Project: The early detection and prediction of road anomalies by IoT deceives attached to cars (<https://issm2022-ai-contest.jimdofree.com/award-result/>) (12/2022).
- \* 1st place in Business Plan challenge in INSUPER Corporate Strategy Competition (August/2017).

### –MEXT Scholar: Master's Thesis

*Apr/2022 - Mar/2024*

*Leaf Area Index Estimation of Tomato Plants by Image Processing and Deep Learning*

- \* Tools & technologies used: Semantic Segmentation, Deep Learning, Regression, Image Processing

## EXTRA-CURRICULAR ACHIEVEMENTS

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- **JICA Scholar:** Undergraduate level education program for Nikkei Next Generation Yokohama, Kanagawa