Keisuke Umezawa

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Senior Engineering Manager, Machine Learning /
Head of Engineering, Customer Service Platform

Profile Summary

I am a machine learning engineering manager who has a wide variety of experiences such as ad matching, recommendations, financial market forecasts, customer attribute prediction, chatbots, user and content moderations, etc. I have experienced management of projects and leading teams for ML in addition to hands-on experience in ML modeling, backend system design, and development. Nowadays, I also contribute to the management of strategy and organization for the customer support platform division to maximize the outcome and be accountable for the company.

Work Experience

2022.1-(Current)   Head of Engineering, Customer Service Platform: Mercari, Inc, Japan

- Organization management such as team forming, budget planning, etc.
- Strategy manegement such as anual planning, quarterly planning, etc.

2019.12-(Current) Engineering Manager, Machine Learning: Mercari, Inc, Japan

- Recommendation
  - Provide personalized components on the home screen
- Customer Support Platform
  - Automatic response to customer contacts by ML
  - Template suggestion to reply in the contact tool
- Trust and Safty
  - Content moderation with item and user behavior information
- Marketing Automation
  - Platform for predicting customer attributes

2018.3-2019.11   Engineer, **Chief Engineering Manager**: AlpacaJapan, Japan

- Leading model development for **AlpacaForecast** (Forex market prediction) using deep learning with data scientists
- Developed trading backtesting engine "**AlpacaDB/backlight**" to standardize evaluation method
- Standardize development process and team management: introduced ticketing system, scrum meeting, 1on1 and guidelines for development and communication

2017.3-(Current) Chainer Evangelist, **Optuna Developer**: Preferred Networks, Japan

- Responsible for increasing people who uses "**Chainer**"
  - Organizing **chug** (Chainer User Group)
  - Holding talks about the deep learning and its framework "**Chainer**"
  - Improving the **documentation** and **tutorials**
  - Holded more than 10 hands-ons and meetups

2016.8-2018.3 Engineer: Yahoo Japan Corporation, Japan

- Developed inhouse search engines for the ad and media services
  - **developing inhouse search engine for advertisement distribution system** with C++, Java and Python
  - Instructed agile software development such as Scrum
  - Instructed C++ cording in the team
- Led and productized inhouse recommendation engine for the media services
  - Leaded a data scientist and system engineers to build new deep learning based **recommendation system**
  - Responsible for satisfying requirements, architecture design and team management

2014.4-2016.8 Quantitative Analyst and Model Developer: the Bank of Tokyo Mitsubishi UFJ, Japan

- Developed derivatives pricing model and risk management system with C++

Education

2012.4-2014.3 MSc, Information Science and Technology; Graduate School of Information Science and Technology, the University of Tokyo, Japan

- Human motion recognition and robot motion generation by HMM

2012.5-2012.8 Internship, at Learning Algorithms and Systems Laboratory (LASA); the Ecole Polytechnique Federale de Lausanne (EPFL), Switzerland

2008.4-2012.3 BE, Department of Mechano-Informatics; Faculty of Engineering, the University of Tokyo, Japan

Technical Experience

Product Management	Managed teams using following ideas:
	• Writing technical specs and requirements
	• Schedule management
	• Agile Methodology (Scrum/Kanban)
	• Ticketing tools such as Jira, Github projects

Programming Languages	**first-lang**: experienced items as follows with C++ and python.
	• Object-Oriented Programming
	• Design of API
	• Multi-thread programming

In addition, basic knowledge of **Java**, **Go**.

System Architecture	Basic experience of **RDS**, **KVS**, **Message Queue**, **Search Engine**, **Restful API**
Development Tools	Basic experience of **GitHub**, **Docker**, **k8s**, **ci/cd**, **GCP/AWS**
Machine Learning Tools	Basic experience of ML libraries such as **PyTorch**, **scikit-learn**, **pandas** and etc.

Publication

- A. L. P. Ureche, K. Umezawa, Y. Nakamura and A. Billard, "Task Parameterization Using Continuous Constraints Extracted From Human Demonstrations," in IEEE Transactions on Robotics, vol. 31, no. 6, pp. 1458-1471, Dec. 2015. **link**

Extra Section

- Certificates:
  - IPA Database Specialist
- Languages:
  - Japanese (native)
  - English (CEFR - B2)