# Takuya Kitazawa

- M.S. in Information Science and Technology, specialized in recommender systems.
- 6+ years of hands-on experience as a Software Engineer, OSS Developer, Data Scientist, and Machine Learning Engineer.
- Developing consumer-facing web/mobile applications and their backend infrastructure.
- Deploying machine learning solutions to an enterprise big data analytics platform.
- Wearing many hats in global teams, ranging from Technical Evangelist and Pre-Sales Engineer to Solution Architect and Product Manager, as a bilingual customer-centric product developer.

## Work

**02/2021 – Present**

### Senior Product Manager
Treasure Data, Vancouver, BC, Canada

**10/2020 – 02/2021**

### Senior Product Manager
Treasure Data, Tokyo, Japan

In the context of machine learning and data science for enterprise marketing data, I'm currently responsible for translating client's business needs into technical problems and building data-driven solutions on top of our data visualization & analytics capability.

**02/2020 – 09/2020**

### Senior Product Manager

**04/2019 – 02/2020**

### Staff Engineer

**07/2018 – 03/2019**

### Senior Engineer
Arm, Tokyo, Japan

(Spin-off Treasure Data as an independent organization)

As an engineer:

- Evangelized the connection of big data, machine learning, data science, and IoT, both internally and externally.
- Worked closely with an internal sales engineering team and served as a data science consultant to accomplish customer-facing machine learning projects in a wide variety of industries, including retail, gaming, and online media.
- Represented individual contributors in Arm's data business division, and mapped out granular IoT-data integrated use cases and solution ideas through customer-facing work with global teams.
- Led the development of a brand-new Python client tool for an enterprise big data analytics platform, and renovated the surrounding data science ecosystem from the product standpoint.

As a product manager:

- Worked with multi-regional cross-functional teams, and continuously delivered marketer-facing features in an enterprise customer data management platform by bridging the communications among internal/external and technical/non-technical stakeholders.
- I was particularly responsible for product development and strategy establishment in the applied machine learning and customer data analytics domain, and we have successfully recognized as "Strong Performer" in The Forrester Wave™: Customer Analytics Technologies, Q3 2020.
- Led a collaborative project with Arm Research, an Arm's internal research-oriented group, and published a novel solution template for data-driven multi-touch attribution.

**02/2017 – 07/2018**

### Data Science Engineer
Treasure Data, Tokyo, Japan

(Acquired by Arm)

- Regularly contributed to the development of Apache Hivemall, a scalable machine learning library running on Apache Hive and Spark.

## Contact

- @ k.takuti@gmail.com
- twitter.com/takuti
- github.com/takuti
- linkedin.com/in/takuti
- Takuya Kitazawa's talks

## Personal

- 25/02/1993, Nagano, Japan
- Vancouver, BC, Canada
- Traveling, Running, Hiking

## Skills

- Unix, Linux, Windows, AWS, Docker, Git, MySQL, PostgreSQL, MongoDB, Fluentd, Spark, Hive
- Python, Julia, Java, Scala, Ruby, JavaScript (Node.js), PHP, MATLAB, Swift, Objective-C, C, C++
- Japanese (native), English (IELTS Academic Overall 7.0 in Feb 2020, General Training Overall 7.5 in Feb 2021)

## Courses and Certifications

- UI / UX Specialization, California Institute of the Arts, Coursera, Aug 2020.
- Finance for Non-Finance Professionals, Rice University, Coursera, May 2020.
- Introduction to User Experience Design, Georgia Institute of Technology, Coursera, May 2020.
- Functional Programming in Scala Specialization, École Polytechnique Fédérale de Lausanne, Coursera, May 2020.
- Applying Machine Learning to your Data with GCP, Google, Coursera, Sep 2018.
- Introduction to Recommender Systems, University of Minnesota, Coursera, Oct 2016.
- Machine Learning, Stanford University, Coursera, June 2014.
- Applied Information Technology Engineer Examination, Information-technology Promotion Agency (IPA), Japan. Passed in 2010, with a pass rate of 20.3% (8,592 out of 42,338).

## Publications

### Conference Talks

- T. Kitazawa. Apache Hivemall Meets PySpark: Scalable Machine Learning with Hive, Spark, and Python. ApacheCon Europe 2019.
- T. Kitazawa and M. Yui. What's New and Coming to Apache Hivemall: Building More Flexible Machine Learning Solution for Apache Hive and Spark. ApacheCon North America 2019.
- T. Kitazawa. Recommendation.jl: Building Recommender Systems in Julia. JuliaCon 2019.
- T. Kitazawa. Apache Hivemall: Query-Based Handy,

- Led the development of out-of-the-box machine learning applications from competitor analysis and requirement gathering to system implementation and customer onboarding.

**12/2016 – 01/2017**

## R&D Intern

Silver Egg Technology, Tokyo, Japan

Conducted in-depth data analysis on customer's purchase data collected from a real-world e-commerce service, and applied a novel recommendation algorithm, which has been proposed as a part of my master's thesis, that resolves unique problems associated with the characteristics of data.

**08/2016 – 09/2016**

## Machine Learning Intern

Treasure Data, Tokyo, Japan

Contributed to the development of Apache Hivemall, an open-sourced large-scale machine learning toolkit, by implementing user-defined functions (UDFs) for state-of-the-art recommendation and anomaly detection techniques.

Led the PoC implementation of a next-generation anomaly detection system for multiple metrics, collected from an enterprise big data management platform.

**10/2015 – 06/2016**

## Part-time Software Engineer

**08/2015 – 09/2015**

## Software Engineering Intern

Rakuten Institute of Technology, Tokyo, Japan

In the research organization, I have worked on the development of recommendation algorithms for an online golf booking service. Based on a previous study, I have conducted further assessments and proposed improvement ideas in terms of both theory and practice.

**02/2012 – 02/2013**

## Part-time Software Engineer

HANASAKE PICTURES, Fukushima, Japan

Contributed to the development of (1) PHP applications for a Japanese avatar-based social networking service, and (2) an iOS application for virtual trial fitting using an image blending algorithm named Poisson Image Blending.

**10/2011 – 03/2013**

## Research Assistant / Web Developer

The University of Aizu, Fukushima, Japan

Led the development of a Ruby on Rails-based web application "Aizu Weather" for regional weather monitoring, accompanied by interactive geospatial data visualization using D3.js.

# Education

**04/2015 – 03/2017**

## M.S. in Information Science and Technology

The University of Tokyo, Tokyo, Japan

Thesis: Persistently Cold-Starting Online Item Recommendation for Implicit Feedback Data

Advisor: Dr. Takayasu Matsuo

GPA: 4.0

Activities:

- Served as a student volunteer at RecSys 2016 (Sep 2016)
- Participated in Machine Learning Summer School Kyoto 2015 (Aug 2015)

**04/2011 – 03/2015**

## B.S. in Computer Science and Engineering

The University of Aizu, Fukushima, Japan

Thesis: User Modeling in Folksonomies: Relational Clustering and Tag Weighting

Advisor: Dr. Masahide Sugiyama

GPA: 3.97

Honors and Awards:

- President's Award — Summa Cum Laude equivalent (2015)

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Scalable Machine Learning on Hive. ODSC Europe 2018.

T. Kitazawa. FluRS: A Library for Streaming Recommendation Algorithms. EuroSciPy 2017.

International Conference, Workshop, and Demo Papers (referred)

T. Kitazawa. Zero-Coding UMAP in Marketing: A Scalable Platform for Profiling and Predicting Customer Behavior by Just Clicking on the Screen. Adjunct Publication of the 27th Conference on User Modeling, Adaptation and Personalization (UMAP 2019).

T. Kitazawa and M. Yui. Query-Based Simple and Scalable Recommender Systems with Apache Hivemall. Proceedings of the 12th ACM Conference on Recommender Systems (RecSys 2018).

T. Kitazawa. Sketching Dynamic User-Item Interactions for Online Item Recommendation. Proceedings of the 2017 Conference on Conference Human Information Interaction and Retrieval (CHIIR 2017).

T. Kitazawa. Incremental Factorization Machines for Persistently Cold-starting Online Item Recommendation. The 1st Workshop on Profiling User Preferences for Dynamic Online and Real-Time Recommendations (RecProfile), in conjunction with RecSys 2016.

T. Kitazawa and M. Sugiyama. User Modeling in Folksonomies: Relational Clustering and Tag Weighting. Proceedings of the 5th International Conference on Web Intelligence, Mining and Semantics (WIMS 2015).

Japanese Domestic Conference Papers (non-referred)

T. Kitazawa. Incremental Item Recommendation Using a SVD-based Streaming Anomaly Detection Framework (in Japanese). Numerical Analysis Symposium 2016 (NAS 2016), June 2016.

T. Kitazawa. Incremental Factorization Machines for Item Recommendation in Data Streams. The 30th Annual Conference of the Japanese Society for Artificial Intelligence (JSAI 2016), IC2-5, June 2016.

T. Kitazawa and T. Matsuo. Incremental Approaches for Matrix Approximation: Performance Evaluations and Their Possible Applications (in Japanese). The Japanese Society for Artificial Intelligence SIG-FPAI-98, Aug 2015.

T. Kitazawa and M. Sugiyama. User Modeling through Relational Clustering on Folksonomy (in Japanese). The 77th National Convention of Information Processing Society of Japan (IPSJ 2015), 3N09, Mar 2015.

T. Kitazawa and M. Sugiyama. Relational Clustering in Social Bookmark. Tohoku-Section Joint Convention of Institutes of Electrical and Information Engineering, 2A05, Aug 2014. IEEE Sendai Section Student Awards: The Best Paper Prize

- Dean's List of Distinguished Students (2012 – 2015)
- Best Paper Prize, IEEE Sendai Section Student Awards (2014)
- Innovative Award, The Tokyo American Center and Keio SFC Entrepreneurship Seminar and Business Plan Competition (2012)

Activities:

- Served as a teaching assistant in a Numerical Analysis course, and thought Java coding of numerical methods to 20+ undergraduates (Fall 2014)
- Participated in Security and Programming Camp 2011 to deepen knowledge in web security (Aug 2011)

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