# Takuya Kitazawa

- 🪪 **Product developer** with 10+ years in startups, Big Tech, non-profit, and freelancing.

- 🔥 **Focused on** full-stack development, data-driven solutions, and product management for scalable outcomes.

- 🤝 **Global collaborator** in teams, open source, research, mentorship, and social good.

## Work

**2022/09 – Present**

### Freelance Software Developer
Self-employed in British Columbia, Canada

`Python` `Google Cloud` `Apache Beam` `Data Engineering`
`Natural Language Processing`

**Enabling** individuals and small businesses (up to 150 people) to transform data into actionable insights through analytics pipelines, ML/NLP models, and customer-facing applications.

**Services:** Full-stack development, data science consulting, product management, mentorship and training.

Learn more at takuti.me/services.

**2025/01 – Present**

**2023/08 – 2024/12**

### Acting ICT Director
### Information and Communication Technology Advisor
Emerge Livelihoods (formerly Mzuzu Entrepreneur Hub), Mzuzu, Malawi

`C#` `.NET` `Digital Marketing` `International Development`
`Leadership` `Corporate Strategy`

**Canadian international volunteer** through World University Service of Canada, advancing equitable ICT access in Malawi. Featured in "Spotlight on Takuya: An Uplifting Volunteer Experience."

- **Assessment:** Conducted organization-wide ICT capacity assessment and strategic recommendations.

- **Training:** Trained 19 Malawian youth (9F, 10M, aged 18-31) in 3-month Python programming course.

- **Optimization:** Improved Flask web application achieving 50% Lighthouse Performance gains.

- **Development:** Led Android e-learning app development and Google Play launch.

**Current Role:** Remote management of 5-10 professionals, strategic technology oversight.

**2021/08 – 2022/08**

### Software Development Engineer - Personalization
Amazon, Vancouver, BC, Canada

`TypeScript` `Scala` `Python` `AWS` `Apache Spark`

## Connect

- @ hello@takuti.me
- 📅 calendly.com/**takuti**
- 💼 linkedin.com/in/**takuti**
- ⌗ github.com/**takuti**

## Basic Information

- 🌐 Japanese (born in Nagano, Japan)
- 🏠 British Columbia, Canada (permanent resident since June 2022)
- 🔤 Japanese (native), English (professional proficiency)

## Publications

🖼 Conference Talks

- ▸ Why Do We Digitalize? Contextualizing and Sustaining the Transformation in Systems. ICT Association of Malawi, International ICT Expo 2024.

- ▸ Recommendation.jl: Modeling User-Item Interactions in Julia. JuliaCon 2022 (also in 2019).

- ▸ Apache Hivemall Meets PySpark: Scalable Machine Learning. ApacheCon Europe 2019 (also at ApacheCon North America).

- ▸ Apache Hivemall: Query-Based Scalable Machine Learning on Hive. ODSC Europe 2018.

- ▸ FluRS: A Library for Streaming Recommendation Algorithms. EuroSciPy 2017.

📄 Peer-Reviewed Papers

- ▸ Zero-Coding UMAP in Marketing. UMAP 2019.

- ▸ Query-Based Simple and Scalable Recommender Systems with Apache Hivemall. RecSys 2018.

- ▸ Sketching Dynamic User-Item Interactions for Online Item Recommendation. CHIIR 2017.

- ▸ Incremental Factorization Machines for Persistently Cold-starting Online Item Recommendation. RecProfile 2016 (at RecSys'16).

`Apache Airflow`  `Recommender Systems`

**Recommender Systems:** Developed Amazon's "Buy Again" repeat purchase recommendation system, implementing frontend components and backend data pipelines.

2020/10 – 2021/08
## Senior Product Manager
2021/02 – 2021/08  [Treasure Data (Canada)](#), Vancouver, BC, Canada
2020/10 – 2021/02  [Treasure Data](#), Tokyo, Japan

`Python`  `Data Visualization`  `Predictive Modeling`  `Digital Marketing`  `Product Management`

**Managed product development** in digital marketing, analytics, and ML: data visualization, A/B testing, predictive customer scoring.

**Developed solution templates** within [Treasure Boxes](#) ecosystem to [enable strategic customer data use](#).

2020/02 – 2020/09
## Product Manager
2019/04 – 2020/01
## Staff Engineer
2018/08 – 2019/03
## Senior Engineer
[Arm](#), Tokyo, Japan

(Spin-off [Treasure Data](#) as an independent organization)

`Python`  `Apache Hive`  `IoT`  `Data Science`  `Product Management`

**Engineering:** Advanced big data, ML, and IoT integration across retail, gaming, and media. Led [Python SDK](#) development for enterprise analytics platform.

**Product Management:** Coordinated multi-regional teams for customer data platform, contributing to "Strong Performer" in [Forrester Wave™](#) Customer Analytics Technologies Q3 2020. Co-led [multi-touch attribution solution](#) with Arm Research.

2017/02 – 2018/07
## Data Science Engineer
[Treasure Data](#), Tokyo, Japan

(Acquired by [Arm](#))

`Java`  `Apache Hive`  `Apache Spark`  `Ruby on Rails`

**Contributed to** [Apache Hivemall](#), a scalable ML library for Apache Hive and Spark.

**Led development** of [out-of-the-box ML solutions](#), managing full lifecycle from analysis to customer onboarding.

2015/08 – 2016/06
## Part-time Software Engineer
[Rakuten Institute of Technology](#), Tokyo, Japan

`Python`  `PHP`  `Recommender Systems`

**Algorithm Research:** Developed recommendation algorithms for online golf booking service. Conducted assessments and proposed improvements based on [baseline study](#).

2012/02 – 2013/02
## Part-time Software Engineer

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▸ [User Modeling in Folksonomies: Relational Clustering and Tag Weighting](#). WIMS 2015.

🎓 See [Google Scholar](#) for a complete list of publications.

## Key Certifications

Demonstrating expertise across technology and social impact:

💻 **Technology & AI**

▸ [Foundations of Humane Technology](#), Center for Humane Technology (2022)

▸ [Blockchain Specialization](#), University at Buffalo (2021)

▸ [Functional Programming in Scala Specialization](#), EPFL (2020)

▸ Applied Information Technology Engineer, IPA Japan (2010) — 20.3% pass rate

🌐 **Social Impact & Sustainability**

▸ [Food Sustainability & Mindful Eating Specialization](#), Stanford University (2023)

▸ [Driving Business towards Sustainable Development Goals](#), Erasmus University (2021)

▸ [Global Environmental Management](#), Technical University of Denmark (2021)

💼 **Business & Design**

▸ [Logic and Critical Thinking](#), Duke University (2023)

▸ [Supply Chain Management Specialization](#), Rutgers Business School (2021)

▸ [UI/UX Design Specialization](#), California Institute of the Arts (2020)

❤️ **Safety & Leadership**

▸ Wilderness First Aid & CPR/AED Level C, Canadian Red Cross (2023-2026)

▸ [Renewable Energy and Green Building Entrepreneurship](#) (with honors), Duke University (2021)

**HANASAKE PICTURES**, Fukushima, Japan

`Objective-C`  `PHP`  `Image Processing`

**Mobile & Web Development:** Developed PHP applications for avatar-based social networking and iOS app for virtual trial fitting using Poisson Image Blending.

2011/10 – 2013/03
### Part-time Research Assistant / Web Developer
The University of Aizu, Fukushima, Japan

`Ruby on Rails`  `Data Visualization`  `GIS`

**Research Application Development:** Led development of Ruby on Rails web application for regional weather monitoring with interactive geospatial data visualization using d3.js.

## Education

2015/04 – 2017/03
### Master of Information Science and Technology
The University of Tokyo, Tokyo, Japan

**Thesis:** Persistently Cold-Starting Online Item Recommendation for Implicit Feedback Data ⎪ **GPA:** 4.0 ⎪ **Credential:** WES Verified

**Experience:** Student volunteer RecSys 2016, ML Summer School Kyoto 2015

**R&D Intern** Silver Egg Technology: Applied novel recommendation algorithms

**ML Intern** Treasure Data: Apache Hivemall UDFs, anomaly detection system

2011/04 – 2015/03
### B.S. in Computer Science and Engineering
The University of Aizu, Fukushima, Japan

**Thesis:** User Modeling in Folksonomies: Relational Clustering and Tag Weighting ⎪ **GPA:** 3.97

**Honors:** President's Award (Summa Cum Laude, 2015), Dean's List (2012–2015), Best Paper Prize IEEE Sendai (2014), Innovative Award Business Plan Competition (2012)

**Activities:** TA Numerical Analysis (20+ students), Security & Programming Camp (2011)