MICHIHARU YAMASHITA

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Education

Tokyo Institute of Technology, Tokyo (Japan) April 2015 – March 2017
M.Eng. in Computational Intelligence and Systems Science (Prof. Kazuo Yano) GPA: 94/100
Salutatorian (**2nd** place in the department)
Master Thesis: *Does Temperature Change Happiness?: An Empirical Analysis Using Wearable Sensors in Offices*
(**The Second Best Master Thesis Award**)

University of Tsukuba, Tsukuba (Japan) April 2011 – March 2015
B.S. in Management Science and Engineering (Prof. Ushio Sumita) GPA: 3.3/4.0
Bachelor Thesis: *Network Analysis and Visualization for Mobile Applications' Competitiveness Based on Logs of Installing and Uninstalling Applications*

Employment

Recruit Holdings, Tokyo (Japan) April 2017 – January 2019
Research Engineer and Machine Learning Engineer
- Analyzed cross-disciplinary service data of millions of user data spanning multiple domains: search, reserve, and review logs regarding restaurants, travel, beauty salons, real estate, and human resources.
- Extracted user preference from GPS based location data (This research was accepted by **IEEE Big Data 2018 Workshop on Application of Big Data for Computational Social Science**.)
- Developed a machine learning based recommendation engine using the location-based user preference, and improved over 10% accuracy more than the previous one.

Megagon Labs (formerly Recruit Institute of Technology), Tokyo (Japan) April 2017 – March 2018
Research Engineer
- Developed an entity matching module En2Kana, which specified the same meaning entities between Japanese and English (This research was accepted by **SIGMORPHON Workshop at EMNLP 2018**.)
- Applied En2Kana into our companies' data and increased the sales potential of $20M.
- Developed an entity extraction module, which automatically crawls the result of Google search and detects beauty salons' websites from the snippets.
- Promoted open-source components BigGorilla including the modules above, which helps data scientists to reduce the time of data pre-processing like data acquisition, entity linking, and schema matching.

Life is Tech USA, Los Angeles (USA) July 2019 – August 2019
Data Scientist Intern collaborated with Disney
- Analyzed access log data for improving the website contents.
- Developed an algorithm for advertising optimization to enhance search engine marketing.

Hitachi Central Research Laboratory, Tokyo (Japan) April 2015 – March 2017
Collaborative Research Student (Supervised by Prof. Kazuo Yano)
- Researched on computational social science and science of happiness.
- Developed a model of the optimal indoor temperature for human's happiness through wearable sensors (This research was accepted by IEICE 2016.)
- Exploratory data analysis to wearable sensors data, which included speaking frequency, human relationship, acceleration, temperature and moisture in office.

Ohma, Tokyo (Japan) March 2016 – March 2017
Software Engineer Intern (Supervised by Prof. Yutaka Matsuo)
- Developed a people search engine SPYSEE2, which automatically collects and visualizes information with a strong focus on human relations and had more than **1 million page-views per month**.
- Developed machine learning and natural language processing based algorithms for the extraction of various types of information about people (bio-data, profile picture, social network, related web pages, etc.) from unstructured and noisy web data.
- Crawled millions of web pages efficiently using programs built to run using Amazon Web Services.
- Developed face recognition system which specifies Asian people (This research was accepted by JSAI 2017)

Recruit Holdings, Tokyo (Japan)   August 2015 – September 2015
Data Scientist Intern

- Developed a new recommendation engine of an e-commerce service "Ponpare", which marked the best score and performance in the history of the company.

Fuller, Tokyo (Japan)   April 2014 – March 2015
Collaborative Research Student (Supervised by Prof. Ushio Sumita)

- Developed an algorithm for estimating key competitive performance measures of smartphone applications.
- Applied ranking algorithms for mobile applications and extracted app trends.
- Analyzed data of installing and uninstalling mobile applications for each smartphone, and consulting regularly.

Taiyo Yuden Mobile Technology, Tokyo (Japan)   April 2014 – March 2015
Collaborative Research Student (Supervised by Prof. Ushio Sumita)

- Developed a Java-based simulation system for a factory's logistics to improve productivity.
- Developed optimization models for planning and scheduling of the factory

Publications

- **Michiharu Yamashita**, Shota Katsumata, and Yusuke Fukasawa. "Discovery of User Preferences from Big Geospatial Data Using Topic Models." Proceedings of the 2018 IEEE International Conference on Big Data (The 3rd International Workshop on Application of Big Data for Computational Social Science). IEEE, 2018. (https://ieeexplore.ieee.org/document/8622625)

- **Michiharu Yamashita**, Hideki Awashima, and Hidekazu Oiwa. "A Comparison of Entity Matching Methods between English and Japanese Katakana." Proceedings of the 15th SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology at EMNLP, 2018. (https://www.aclweb.org/anthology/W18-5809)

- Kent Kawai, **Michiharu Yamashita**, and Yutaka Matsuo. "Face Recognition System Based on Convolutional Neural Network Robust to Occlusion and Low Quality Images." The 31st Annual Conference of the Japanese Society for Artificial Intelligence. JSAI, 2017.

- **Michiharu Yamashita**, Nobuo Sato, and Kazuo Yano. "Enhancing Collective Happiness by Controlling Room Temperature Using Big Data from Wearable Sensors." The 2016 IEICE General Conference. IEICE, 2016.

Honors and Awards

Recruit Holdings Freshman Award First Prize 2018, Recruit Holdings   April 2018
1st in the whole of Recruit Holdings Group of over 500 freshmen

Recruit Holdings R&D MVP Award 2017, Recruit Holdings   April 2018
1st in R&D department of Recruit Holdings of over 200 employees

Full Repayment Exemption of Graduate Student Loan $20,000 for Excellent Achievement, JASSO   August 2017
Top 10% of 26,987 Graduate Students using the Loan at all universities in Japan

Salutatorian of Tokyo Institute of Technology, Tokyo Institute of Technology   March 2017
The **2nd** representative in the department

The Second Best Master Thesis Award, Tokyo Institute of Technology   February 2017
Master Thesis ranking **2nd** in the department (2/62)

Full Tuition Exemption for Students with Outstanding Academic Performance   April 2015 – March 2017
from Tokyo Institute of Technology

Recruit Holdings Internship Award First Prize 2016, Recruit Holdings   September 2015
1st of over 30 intern students

Full Tuition Exemption for Students with Outstanding Academic Capabilities   April 2011 – March 2015
from University of Tsukuba

Technical Strengths

Language: Japanese (Native), English (Fluent), Mandarin (Beginner)
Programming and Software: Python, Java, C/C++, Swift, R, SQL, Javascript, HTML, CSS, LaTex
Framework and Tools: Tensorflow, Keras, Numpy/Scipy, scikit-learn, Flask, Elasticsearch, GCP, AWS