# MICHIHARU YAMASHITA

Tokyo, Japan

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#### Education

## Tokyo Institute of Technology, Tokyo (Japan)

April 2015 – March 2017

M.Eng. in Computational Intelligence and System Science (Prof. Kazuo Yano)

Major GPA: 95.10/100

Salutatorian (Graduated ranking 2nd in the department)

Cumulative GPA: 93.64/100

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: 3.30/4.0

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

Machine Learning Engineer

- Researched on cross-disciplinary service data, which include a wide range of fields connecting life events like restaurant, beauty salon, travelling, marriage, and housing.
- Extracted user preference using GPS based location data (This research was accepted by IEEE Big Data 2018.)
- Developed a recommendation engine based on location based preference and improved over 10% accuracy more than previous one.

# Recruit Institute of Technology, Tokyo (Japan) / Mountain View (USA)

April 2017 – March 2018

Research Scientist

- Developed an entity matching module En2Kana, which specified same meaning entities between Japanese and English (This research was accepted by **SIGMORPHON Workshop at EMNLP 2018**.)
- Applied En2Kana into our company and detected \$20M potential sells.
- Developed an entity extraction module, which automatically detect beauty salons' websites from snippets of Google search.
- Evangelized data pre-processing components BigGorilla which help data scientists reduce the time of preprocessing.

#### 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.
- Enhanced search engine marketing for acquiring new customers.

#### 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 optimal thermal of people from wearable sensors (This research was accepted by IEICE.)
- Designed the laboratory environment and system as a first lab member.
- Exploratory Data Analysis to wearable sensor based 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 specify Asian people (This research was accepted by JSAI 2017)

# Recruit Holdings, Tokyo (Japan)

August 2016 – September 2016

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 trend.
- 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 (Big Data). 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.

Full Repayment Exemption of Graduate Student Loan \$20,000 for Outstanding Achievement

#### **Honors and Awards**

#### Recruit Holdings Freshman Award First Prize 2018

April 2018

1st in the whole of Recruit Holdings Group of over 500 freshmen

## Recruit Holdings R&D MVP Award 2017

April 2018

1st in R&D department of Recruit Holdings of over 200 employees

**Top 10%** of 26,987 Graduate Students using the Loan at all universities in Japan

August 2017

Salutatorian in Tokyo Institute of Technology

# Graduated ranking 2nd in the department

March 2017

February 2017

The Second Best Award for Master Thesis

Master Thesis ranking **2nd** in the department

Full Tuition Exemption for Students with Outstanding Academic Performance from Tokyo Institute of Technology

April 2015 – March 2017

# Recruit Holdings Internship Award First Prize 2016

March 2016

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 (Business), 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