

# Kohei YAMAMOTO

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## Skills and Abilities

- Interests: Spatiotemporal Data Analytics, Big Data, Machine Learning, Location Science, Human Computer Interaction, Applied Image Analysis, Info. Visualisation, Accessibility, GIS, Finance
- Languages: Japanese (Native), English (Fluent: TOEIC 935/990)
- Computer Languages: Python, ObjC, Scala, Java, C, Swift, Assembly
- Others: PPT Visualisation, Public Speaking, Video Making

## Education and Research Experience

### **National University of Singapore (NUS)**

- Master of Science in Applied Geographic Information Systems Singapore, [Aug 2019 –Present]
- Member of the Department of Geography, in the domain of Spatiotemporal Data Analytics.
- Chose this area as it located between human computer interaction and location science, which were all my research area during my Bachelor's study.

### **IBM Research – Student Researcher\*<sup>3</sup>**

Japan, [May 2018 – Jul 2018]

- As a member of the team, tackled research focused on the characteristic movements of visually impaired persons, which affects localisation accuracy, and improved the accuracy by fusing several localisation techniques. This research was awarded in an academic research society and received IPSJ Yamashita SIG Research Award, which is one of the rigorous achievements in Japanese IT society.

### **Yahoo Japan Research – Collaborative Researcher\*<sup>2</sup>**

Japan, [Mar 2017 – Nov 2018]

- Worked on collaborative research about datasets selection algorithm for indoor localisation's model updates, utilising similarity, transfer learning, and clustering methods. This research is presented at an international conference on indoor positioning and navigation.

### **Ritsumeikan University\*<sup>1</sup>**

- Master of Engineering (Enrolled only for my gap year, withdrew) Japan, [Apr 2018 – Jun 2019]
- Bachelor of Engineering (Computer Science) Japan, [Apr 2014 – Mar2018]
- Member of the Department of Computer Science, Information Science and Engineering, along with being the **top placed** Bachelor's graduate in the department.
- For the sake of 1.5Y gap year, I was just technically enrolled in the above master program.

## Work Experience

### **Mercari (Merpay) – Product Manager Intern**

Japan, [Apr 2019 – Jun 2019]

- Worked on financial mobile-payment-products management including data analysis, attributes-oriented analysis, human computer interaction in notification and UI/UX.

### **GumGum – Ad Management/Analysis Intern**

Japan, [Jan 2019 – Mar 2019]

- Worked on Ad management and a tool making at AI/computer vision start-up that originated in California, USA.

### **Microsoft – Technical Account Manager Intern**

Japan, [Aug 2018 – Sep 2018]

- Tackled tasks on a global scale, which were related to technical issues and in-company problems, such as an information silo, also visited customers and built a web-based mock-up. Finally, I was one of the best interns selected to make a presentation to the Executive Officers and was given job offer.

### **Sony – Software Engineer Intern**

Japan, [Feb 2017 – Feb 2017]

- Built load balance on a virtual multi-network topology for 4K broadcasting.

## Awards and Financial Budgets

- *IPSJ Yamashita SIG Research Award (山下記念研究賞)*, one of the most rigorous awards, named after Prof. Hideo Yamashita, the first president of IPSJ. (2020)
- Nomination to the Best Paper. IEEE IPIN. (2019)
- Repayment Exemption from JASSO Student Loans for Excellent Achievements. (2019)
- Honourable Mention Award at IPSJ SIG AAC (Assistive and Accessible Computing) (2018)
- Award for a student who must create the future. **1,000 USD** (2018)
- University Dean's Award for an outstanding student in the university. **100 USD** (2018)
- Award for a promising and prospective student. **4,500 USD** (2017)
- *Saionji Award* for the top outstanding student. **6,000 USD** (2017)
- *Saionji Award* for the top outstanding student. **7,000 USD** (2016)
- Award for the author of a well-analysed experiment report on MIPS・TCP/IP. **500 USD** (2016)
- *Saionji Award* for the top outstanding student. **7,000 USD** (2015) (1 USD = 100 yen)

## Publications and Articles I Have Written

- **\*2 International Conference, Nominated to the Best Paper:** Kota Tsubouchi, Kohei Yamamoto et al. (2019) No-sweat Detective: No Effort Anomaly Detection for Wi-Fi-Based Localisation. IEEE Indoor Positioning and Indoor Navigation (IPIN) 2019. Pisa, Italy.
- **\*1 Journal:** Yamamoto, K. et al. (2019) Manual Grading Task Support System with Interactive Correction Mechanism. Human Interface Society. vol. 21. no. 1. pp. 73-84.
- **\*3 Received the Honourable Mention Award & IPSJ Yamashita SIG Research Award:** Domestic Conference, 山本 晃平 et al. (2018) 視覚障害者の移動特性を考慮した位置推定手法. IPSJ SIG AAC (Assistive and Accessible Computing). no. 10. pp. 1-7, Japan
- **\*1 International Conference:** Yamamoto K. et al. (2018) GERMIC: Application of a Gesture Recognition Model with Interactive Correction for Manual Grading Tasks. Mobile Computing, Applications, and Services. MobiCASE 2018. vol. 240. Springer, Cham, Osaka, Japan.
- **\*1 Received the Best Presenter Award:** Intra-school Conference, Kohei Yamamoto (2018) Anti-Ageing Calibration Methodology with User Log-Oriented Anomaly Detection for Wi-Fi Fingerprinting Localisation. BEng Thesis
- **\*2 Domestic Conference:** 山本 晃平 et al. (2017) Wi-Fi 測位モデルの経年劣化に特化した異常検知手法. UWW. pp. 43, Japan
- **\*2 International Conference:** Makiko Kawanaka, Kohei Yamamoto et al. (2017) Detecting Aged Deterioration of a Radio Base Station Map for Wi-Fi Positioning. ACM Ubicomp. pp. 547-556, Hawaii, U.S.
- **\*1 Domestic Conference:** 菅 文哉, 山本 晃平 et al. (2017) 手書き文字認識と対話型訂正機構による採点システムの構築. DICOMO. pp. 1754-1760, Japan

## Leadership and Others

- **Microsoft OSS Project:** Microsoft personally offered me 3000 USD worth of Azure, and I have been developing systems focused on location science and notifications. The project further received awards from the university by 2500 USD in total, and the finance department gave me an approach. (2018-19)
- **General Video Editor on Behalf of Microsoft Japan:** As the leader of interns, I was in charge of CG/audio/video editing to create a video that recaps the interns' activities at Microsoft. (2018)
- **eLearning Content Creation/Translation about Whisky Glenlivet:** Received orders personally from a company in Switzerland. (2018)
- **Delegation to China as a Representative of the University:** As the representative of my university, I was delegated to Japan-China Universities' President's Conference to support discussions about "IT, tertiary education, and AI". (2017)
- **Local Vitalisation:** Volunteered for local vitalisation by making a video with a local government and TV station. (2017)

- **Delegation to the U.S. from MOFA as an Advertiser of Culture:** MOFA (Ministry of Foreign Affairs of Japan) delegated me to the U.S. for a national purpose to accelerate mutual (Japan-U.S.) interaction utilising IT media; a project promoted by the Japanese government. (2016)
- **Joint PBL Project with IBM:** Conceived a solution for a company to migrate from on-premises to cloud-based service. (2016)
- **Joint PBL Project with Panasonic Vietnam:** Considered a solution for human resource problems. (2015)