# Taisho Sasada

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## Employment History

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|---|---|---|
| 2020 – 2021 | 🔖 | **Research Internship** Cybozu Labs |
| Aug – Sep, 2020 | 🔖 | **Research Internship** NTT Secure Platform Laboratories |
| 2019 – 2020 | 🔖 | **Data Engineer Internship** Recruit Technologies Co., Ltd |
| 2018 – 2019 | 🔖 | **Data Scientist Internship** en-japan inc. |

## Education

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| 2021 – 2024 | 🔖 | **Ph.D Information Science, NAIST**, Japan in Information Science. Thesis title: *Research on Practical Privacy Protection Techniques Adapting to the Characteristics of Spatio-Temporal Data.* |
| 2020 – 2021 | 🔖 | **M.Sc. Information Science, NAIST**, Japan in Information Science. Thesis title: *A Study on Privacy Preserving Processing of Unstructured Data.* |
| 2016 – 2020 | 🔖 | **B.Sc, Doshisha University**, Japan in Information Science. Thesis title: *A Study on Method to Data Imbalanceness* |
| July – Sep ,2016 | 🔖 | **Exchange Program, St Catharine's, Cambridge University**, England. |

## Research Publications

### Conference Proceedings, Poster

1. Masahiro, H., Sasada, T., Taenaka, Y., & Kadobayashi, Y. (2022). A study on recommender method by federated learning for balancing similarity and diversity, IEICE Technical Report.

2. Sasada, T., Taenaka, Y., & Kadobayashi, Y. (2022a). Decoupling statistical trends from data volume on ldp-based spatio-temporal data collection, IEEE Future Networks World Forum (Accepted).

3. Sasada, T., Taenaka, Y., & Kadobayashi, Y. (2022b). Dpsd: Dynamic private spatial decomposition based on spatial and temporal correlations, The 7th International Conference on Smart Computing; Communication (Accepted).

4. Sasada, T., Taenaka, Y., & Kadobayashi, Y. (2022c). Dynamic privacy control method by considering temporal/spatial trends for preserving intrinsic information value in trajectory data, IEICE Technical Report.

5. Sasada, T., Taenaka, Y., & Kadobayashi, Y. (2022d). Measuring the educational effectiveness of virtual system design exercise using zero-trust access control, IPSJ SIG Collaboration; Learning Environment.

**6** Sasada, T., Masataka, K., Taenaka, Y., & Kadobayashi, Y. (2021a). Differentially-private text generation via text preprocessing to reduce utility loss, International Conference on Artificial Intelligence in Information; Communication.

**7** Sasada, T., Masataka, K., Taenaka, Y., & Kadobayashi, Y. (2021b). A pseudo-text generation model for both privacy protection and intrinsic information value preservation, Proceedings of Forum on Data Engineering; Information Management.

**8** Sasada, T., Masuda, Y., Kawai, M., Taenaka, Y., Kadobayashi, Y., & Fall, D. (2021a). Design and implementation of a zero-trust access control mechanism to verify user authenticity, IEICE.

**9** Sasada, T., Masuda, Y., Kawai, M., Taenaka, Y., Kadobayashi, Y., & Fall, D. (2021b). Zero-trust access control focusing on imbalanced distribution in browser clickstreams, The Eighth International Conference on Software Defined Systems.

**10** Suzuki, T., Sasada, T., Yuto, M., & Taenaka, Y. (2021). Poster: Prototype of a tamper-resistant hosted ids using intel sgx, IPSJ SIG Internet; Operation Technology.

**11** Sasada, T., Liu, Z., Baba, T., Hatano, K., & Kimura, Y. (2020). A resampling method for imbalanced datasets considering noise and overlap, Procedia Computer Science.

**12** Sasada, T., Taenaka, Y., & Kadobayashi, Y. (2020a). Anonymizing location information in unstructured text using knowledge graph, International Conference on Information Integration; Web-based Applications & Services.

**13** Sasada, T., Taenaka, Y., & Kadobayashi, Y. (2020b). Considering the variation of the noise-addition amount in local differential privacy with user trajectory adjacency, IEICE Technical Report.

**14** Sasada, T., Baba, T., Kimura, Y., & Hatano, K. (2019). A resampling method for imbalanced datasets considering data complexity, IPSJ Technical Report.

## Skills

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| Languages | English, Chinese, Japanese |
| Coding | Python, R, Go, Javascript, SQL, SAS LaTeX |
| Databases | MySQL, PostgreSQL, SQLite, Neo4j. |
| AI Framework | Tensorflow, Pytorch, PySyft |
| Big Data Analysis Platform | Hadoop, Spark, Kafka |
| SDN Framework | Ryu, Trema |
| Misc | Docker, Beautifulsoup4, Selenium, SMOTE |

## Miscellaneous Experience

### Awards and Achievements

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| Sep, 2020 | **LAC Award**, Hardening 2020 H3DX |
| March, 2020 | **Student Incentive Award**, The 82nd national Convention of IPSJ |
| Feb, 2020 | **Culture and Information Science Award** |
| 2019 | **SAS Institute Award**, Wakayama data utilization competition the 2th time. |

## Interest

**Privacy-Preserving Technology** (Local Differential Privacy, Homomorphic Encryption)

## Interest (continued)

- **Trust Technology** (Zero Trust Network, Zero Knowledge Proof)

- **Confidential Computing** (Intel SGX, ARM TrustZone, RISC-V Keystone)

- **Encrypted Database** (CryptoDB, ObliDB)

- **Causal inference** (DID, IV, CATE, LATE)

## References

Available on Request