Yuuki NISHIYAMA

Center for Spatial Information Science, The University of Tokyo · Lecturer

Ew601, 4-6-1 Komaba, Meguro, Tokyo

✉ nishiyama@csis.u-tokyo.ac.jp | 🏠 www.yuukinishiyama.com | 🐦 yuuki_nishiyama

Research Areas: Ubiquitous Computing / Context Recognition, Accumulation, and Retrieval Platform / Behavior Change / Passive Mobile Sensing / Spatial Information Analysis

Education

Graduate School of Media and Governance, Keio University		Japan
Ph.D. in Media and Governance		Apr. 2014 - Sep. 2017
Graduate School of Media and Governance, Keio University		Japan
Master of Media and Governance		Apr. 2012 - Mar. 2014
Faculty of Environment and Information Studies, Keio University		Japan
Bachelor of Arts in Environment and Information Studies		Apr. 2008 - Mar. 2012

Experience

Center for Spatial Information Science	Japan
Lecturer (Assistant Professor)	Apr. 2022 - Current
Institute of Industrial Science, The University of Tokyo	Japan
Research Associate	Sep. 2019 - Mar. 2022
Faculty of Information Technology and Electrical Engineering, University of Oulu	Finland
Postdoctoral Researcher	Apr. 2018 - Aug. 2019
Graduate School of Media and Governance, Keio University	Japan
Postdoctoral Researcher	Oct. 2017 - Mar. 2018
Bachelor of Arts in Environment and Information Studies, Keio University	Japan
Part-time Lecturer	Apr. 2017 - Mar. 2018
College of Science and Engineering, Aoyama Gakuin University	Japan
Part-time Assistant	Apr. 2017 - Sep. 2017
Ubicomp Lab, Human Computer Interaction Institute (HCII), School of Computer Science, Carnegie Mellon University	PA, USA
Visiting Research Scholar	Sep. 2015 - Mar. 2016
Global Environmental System Leaders Program (GESL), Keio University	Japan
Research Assistant (RA)	Apr. 2014 - Mar. 2017

Teaching Experiences

Urban Computing Theory	Japan
Graduate School of Frontier Sciences, The University of Tokyo	Autumn 2024
Urban Computing Theory	Japan
Graduate School of Frontier Sciences, The University of Tokyo	Autumn 2023
Introduction to Socio-Cultural Environmental Studies	Japan
Graduate School of Frontier Sciences, The University of Tokyo	Spring 2022

University-wide Open Research Seminar (Introduction to Web Service and Application Design)

The University of Tokyo

Japan

Autumn 2022

Urban Computing Theory

Graduate School of Frontier Sciences, The University of Tokyo

Japan

Autumn 2022

University-wide Open Research Seminar (Introduction to Web Service and Application Design)

The University of Tokyo

Japan

Autumn 2021

Urban Computing Theory

Graduate School of Frontier Sciences, The University of Tokyo

Japan

Autumn 2021

Network Architecture

Graduate School of Frontier Sciences, The University of Tokyo

Japan

Spring 2021

Spatial Information Design

Graduate School of Frontier Sciences, The University of Tokyo

Japan

Autumn 2020

Mobile Computing Faculty of Information Technology and Electrical Engineering

Oulu University

Finland

Autumn 2018

Data Acquisition (GIGA) - Human Activity Sensing using Mobile Phone (Invited Lecture)

Faculty of Environment and Information Studies, Keio University

Japan

Autumn 2017

Fundamentals of Information Technolog 1&2

Faculty of Environment and Information Studies, Keio University

Japan

Autumn 2017

Fundamentals of Information Technolog 1&2

Faculty of Environment and Information Studies, Keio University

Japan

Spring 2017

System Construction Practical Trainin (TA)

College of Science and Engineering, Aoyama Gakuin University

Japan

Spring 2017

Data Acquisition (GIGA): Human Activity Sensing using Mobile Phone (Invited Lecture)

Faculty of Environment and Information Studies, Keio University

Japan

Autumn 2014

Fundamentals of Object-Oriented Programming (TA)

Faculty of Environment and Information Studies, Keio University

Japan

Autumn 2014

Large-Scale Environmental Systems (TA)

Graduate School of Media and Governance, Keio University

Japan

Autumn 2014

Environmental Information System Architecture (TA)

Graduate School of Media and Governance, Keio University

Japan

Spring 2014

Introduction of Novel Fabrication (TA)

Faculty of Environment and Information Studies, Keio University

Japan

Autumn 2013

Object-Oriented Programming (TA)

Faculty of Environment and Information Studies, Keio University

Japan

Autumn 2013

Ubiquitous Information Service (TA)

Faculty of Environment and Information Studies, Keio University

Japan

Autumn 2013

Ubiquitous System Architecture (TA)

Faculty of Environment and Information Studies, Keio University

Japan

Spring 2012

Honors

2024	**Best Poster Award**, The ACM international joint conference on Pervasive and Ubiquitous Computing (UbiComp) *"Investigating Acceptable Voice-based Notification Timings through Earable Devices: A Preliminary Field Study"*	Melbourne, Australia
2024	**Best Poster Award**, The ACM international joint conference on Pervasive and Ubiquitous Computing (UbiComp) *"Toward Detecting Student-Athletes' Condition Using Passive Mobile and Wearable Sensing"*	Melbourne, Australia
2024	**Outstanding Paper Award**, IPSJ 81st Workshop of SIG Ubiquitous Computing System (UBI) (as a co-author)	Japan
2023	**Outstanding Reviewer Awards**, 25th ACM International Conference on Multimodal Interaction (ICMI2023)	Paris, France
2022	**Outstanding Paper Award**, IPSJ 76th Workshop of SIG Ubiquitous Computing System (UBI) (as a co-author)	Japan
2022	**Excellent Presentation Award**, IPSJ 84th National Convention of IPSJ in Sensors for Helath Conditions (as a co-author)	Japan
2022	**Excellent Presentation Award**, IPSJ 84th National Convention of IPSJ in Public Transportation Session (as a co-author)	Japan
2021	**Outstanding Paper Award**, IPSJ 72th Workshop of SIG Ubiquitous Computing System (UBI) (as a co-author)	Japan
2020	**Outstanding Paper Award**, IPSJ 66th Workshop of SIG Ubiquitous Computing System (UBI) (as a co-author)	Japan
2020	**WiP Encouragement Award**, IPSJ 97th Workshop of SIG Mobile computing and smart society system (MBL) (as a co-author)	Japan
2020	**Excellent Presentation Award**, IPSJ 81st Workshop of SIG Itelligent Transportation Systems and Smart Communities (ITS) (as a co-author)	Japan
2018	**Honorable Mention Award**, ACM 20th International Conference on Human-Computer Interaction with Mobile Devices and Services (MobileHCI 2018)	Spain
2015	**Young Researcher Encouragement Award**, IEICE Technical Committee on Ambient Intelligence and Sensor Networks (SIG ASN)	Japan
2015	**Best Poster Award**, IEEE Eighth International Conference on Mobile Computing and Ubiquitous Networking (ICMU2015), (as a co-author)	Japan
2015	**SFC Student Award**, Faculty of Environment and Information Studies/Faculty of Policy Management, Keio University	Japan
2014	**Best Paper Award**, IEEE 16th International Conference on e-Health Networking, Applications and Services (HealthCom 2014)	Brazil

Presentations

Mobile AI Systems (ACM MobiSys2024 Adjunct Workshop)	Tokyo, Japan
Invited Talk	Jun., 2024

- In-the-wild IoT: Lessons from real-world implementations
- `https://ai-mobile-system.vercel.app/program`

30th Workshop on Multimedia Communications and Distributed Processing (DPSWS2022)	Yonago, Japan
Panel Discussion: Speakers	Oct. 2022

- Projections for DPS Workshop Programs in 30 Years
- `https://www.dpsws.org/2022/`

SSE Invited Speaker Series at Stevens Institute of Technology, School of Systems & Enterprises	NJ, United States
Invited Talk	Nov., 2022

- Encouraging human behavior change by using passive mobile sensing and lifelog sharing
- `https://www.eventbrite.com/e/sse-invited-speaker-series-yuuki-nishiyama-phd-tickets-449765870827`

Location Business Japan
Tokyo, Japan
Invited Talk
Apr. 2021
- MOCHA: Development and operation of a system for monitoring campus congestion, confirming contact, and recording stays using Bluetooth beacons for realizing a secure campus life at the University of Tokyo
- `https://forest.f2ff.jp/introduction/5082?project_id=20210401`

Workshop of SIG Smart Sensing System (SSS) in The Society of Instrument and Control Engineers (SICE)
Kumamoto, Japan
Invited Talk
Nov. 2019
- SenbayKit: Introduction of an infrastructure for immediate archiving and re-streaming of multiple data streams using sensor data-integrated video
- `http://rcl.it.aoyama.ac.jp/member/sice-sss/20191115_program.html`

63rd Workshop of SIG Ubiquitous Computing System (UBI) in Information Processing Society of Japan (IPSJ)
Tokyohashi, Japan
Lightning Talk
Aug. 2019
- `http://sigubi.ipsj.or.jp/seminar63/`

Joint Workshop of Regional IoT and Information Capability Consortium / Health Information Consortium
Tokyo, Japan
Invited Talk
Oct. 2019
- Human and Urban Sensing and Analysis Platform Using Mobile and Wearable Devices for Realization of Well-being Smart City
- `https://hip.sfc.keio.ac.jp/2019/10/07/seminar-with-prof-spitz/`

Grants

A Platform for Detecting Postpartum Depression through Passive Mobile SensingPrincipal Investigator
PI

Grant-in-Aid for Early-Career Scientists, Grants-in-Aid for Scientific Research (KAKENHI), Japan Society for the Promotion of Science (JSPS)
2023-2025

Platform for Detecting Postpartum Depression Symptoms Using Passive Mobile Sensing
PI

Grant-in-Aid for Early-Career Scientists, Grants-in-Aid for Scientific Research (KAKENHI), Japan Society for the Promotion of Science (JSPS)
2023-2026

Distributed Collaborative Learning Analytics for Developing Communities
Co-Investigator

Grant-in-Aid for Scientific Research (A), Grants-in-Aid for Scientific Research (KAKENHI), Japan Society for the Promotion of Science (JSPS)
2020-2024

Sensor data processing and its utilization obtained from smartphones
PI
Joint Research with Yahoo! JAPAN R&D
2021-2023

Activity recognition technologies for infants using wearable devices
PI
Joint Research with First-Ascent Inc.
2022-2023

Smart urban transportation infrastructure technology through behavior change and dynamic control of transportation infrastructure
Co-Investigator

National Institute of Information and Communications Technology (NICT) - Beyond 5G R&D Promotion Project
2021-2023

Diversity-driven transformation technologies to realize a hyper-diverse society in the post-corona era
Co-Investigator

National Institute of Information and Communications Technology (NICT) - Research and Development of Information and Communication Technologies for Countermeasures against Viruses and Other Infectious Diseases
2021-2023

Animal Wearable 2.0: Establishment of high-speed communication and high-reliability mechanisms for wildlife IoT

Grant-in-Aid for Scientific Research (A), Grants-in-Aid for Scientific Research (KAKENHI), Japan Society for the Promotion of Science (JSPS)

Co-Investigator

2021-2023

Platform for detecting and utilizing kinesthetics to promote motor learning using voice-based ESMs.

Grant-in-Aid for Early-Career Scientists, Grants-in-Aid for Scientific Research (KAKENHI), Japan Society for the Promotion of Science (JSPS)

PI

2020-2021

Publication

Journal

[J1] Image Generative Semantic Communication with Multi-Modal Similarity Estimation for Resource-Limited Networks
E. Hosonuma, T. Yamazaki, T. Miyoshi, A. Taya, Y. Nishiyama, K. Sezaki
IEICE Transactions on Communications (Aug. 28, 2024). 2024.

[J2] Multi-label Classification Model for Infant Activity Recognition Using Single Inertial Sensor
A. Onodera, R. Ishioka, Y. Nishiyama, K. Sezaki
IEEE Pervasive Computing (Nov. 1, 2024) pp. 1–10. IEEE Computer Society, 2024. [Q2 Journal].

[J3] Compressive Detection of Stochastic Sparse Signals With Unknown Sparsity Degree
Y. Feng, A. Taya, Y. Nishiyama, K. Sezaki, J. Liu
IEEE Signal Processing Letters (Oct. 15, 2023) pp. 1–5. 2023. [Q1 Journal].

[J4] AMoND: Area-Controlled Mobile Ad-hoc Networking with Digital Twin
S. Ono, T. Yamazaki, T. Miyoshi, A. Taya, Y. Nishiyama, K. Sezaki
IEEE Access (Aug. 1, 2023) pp. 1–1. 2023. [Q1 Journal].

[J5] Assessing environmental benefits from shared micromobility systems using machine learning algorithms and Monte Carlo simulation
H. Peng, Y. Nishiyama, K. Sezaki
Sustainable Cities and Society (Nov. 1, 2022) p. 104207. 2022. [Q1 Journal].

[J6] SFC GO: 学生同士の繋がりを支援するオンライン体育授業サポートシステム
佐々木航, 柿野優衣, 中縁嗣, 野田悠加, 羽柴彩月, 山田佑亮, 西山勇毅, 大越匡, 中澤仁, 森将輝, 水鳥寿思, 塩田琴美, 永野智久, 東海林祐子, 加藤貴昭
情報処理学会論文誌デジタルプラクティス（TDP）3.1 (Jan. 15, 2022) pp. 19–33. 2022.

[J7] Mobile phone sensor-based detection of subjective cannabis intoxication in young adults: A feasibility study in real-world settings
S. W. Bae, T. Chung, R. Islam, B. Suffoletto, J. Du, S. Jang, Y. Nishiyama, R. Mulukutla, A. Dey
Drug and Alcohol Dependence (Jan. 1, 2021) p. 108972. 2021. [Q1 Journal].

[J8] Investigating the occurrence of selfie-based emotional contagion over social network
W. Sasaki, Y. Nishiyama, T. Okoshi, J. Nakazawa
Social Network Analysis and Mining 11 (Jan. 1, 2021) p. 8. Springer, 2021. [Q1 Journal].

[J9] MOCHA: Bluetoothビーコンを用いた学内位置情報サービスの開発・運用
西山勇毅, 川原圭博, 瀬崎薫
画像電子学会誌 50.3 (Aug. 1, 2021) pp. 459–461. 画像電子学会, 2021.

[J10] 感染症流行時におけるスマートフォンを用いた 大学生の身体活動量分析
西山勇毅, 柿野優衣, 中縁嗣, 野田悠加, 羽柴彩月, 山田佑亮, 佐々木航, 大越匡, 中澤仁, 森将輝, 水鳥寿思, 塩田琴美, 永野智久, 東海林祐子, 加藤貴昭
情報処理学会論文誌 [特集：ユビキタスコンピューティングシステム（X）] 62.10 (Oct. 1, 2021) pp. 1630–1643. 2021.

[J11] Mobile Assessment of Acute Effects of Marijuana on Cognitive Functioning in Young Adults: Observational Study
T. Chung, S. W. Bae, E.-Y. Mun, B. Suffoletto, Y. Nishiyama, S. Jang, A. K. Dey
JMIR Mhealth Uhealth 8.3 (Mar. 10, 2020) e16240. 2020. [Q1 Journal].

[J12] Smartphone-Based Monitoring of Parkinson Disease: Quasi-Experimental Study to Quantify Hand Tremor Severity and Medication Effectiveness
E. Kuosmanen, F. Wolling, J. Vega, V. Kan, Y. Nishiyama, S. Harper, K. V. Laerhoven, S. Hosio, D. Ferreira
JMIR Mhealth Uhealth 8.11 (Nov. 26, 2020) e21543. 2020. [Q1 Journal].

[J13] HealthyStadium: 他者評価とゲーミフィケーションを用いた食習慣改善ソーシャルメディア
栄元優作, 西山勇毅, 大越匡, 中澤仁
情報処理学会論文誌 60.10 (Jan. 1, 2019) pp. 1881–1895. 2019.

[J14] A Platform for Mutual Watch-Over among the Elderly Using PAN and Gamification
J. Nakazawa, W. Sasaki, M. Obuchi, K. Egashira, Y. Nishiyama, T. Okoshi, T. Yonezawa, H. Tokuda
The IEICE transactions on information and systems J101-D.2 (Jan. 1, 2018) pp. 306–319. 2018.

[J15] MyFactor：ユーザの内面状態に寄与する因子情報の個人特性に適応的な分析
小渕幹夫, 西山勇毅, 大越匡, 米澤拓郎, 中澤仁
情報処理学会論文誌 58.10 (Jan. 1, 2017) pp. 1674–1687. 2017.

[J16] Toward Health Exercise Behavior Change for Teams Using Lifelog Sharing Models
Y. Nishiyama, T. Okoshi, T. Yonezawa, J. Nakazawa, K. Takashio, H. Tokuda
IEEE Journal of Biomedical and Health Informatics 20.3 (Jan. 1, 2016) pp. 775–786. 2016. [Q1 Journal].

[J17] ライフログデータを用いたチームの行動変容促進
西山勇毅, 大越匡, 米澤拓郎, 中澤仁, 高汐一紀, 徳田英幸
情報処理学会論文誌 56.1 (Jan. 1, 2015) pp. 349–361. 一般社団法人情報処理学会, 2015.

Proceedings (Refereed)

[P1] Poster: Towards Estimating UV Index with a Smartphone Utilizing GNSS Signals as a Point Cloud
S. Atsumi, R. Ishioka, K. Tsubouchi, Y. Nishiyama, K. Sezaki
Proceedings of the 22nd Annual International Conference on Mobile Systems, Applications and Services, pp. 626–627, 2024, Tokyo, Japan.

[P2] ReHEarSSE: Recognizing Hidden-in-the-Ear Silently Spelled Expressions
X. Dong, Y. Chen, Y. Nishiyama, K. Sezaki, Y. Wang, K. Christofferson, A. Mariakakis
Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems, 2024, Hawaii, US. [CORE A*].

[P3] RideGuard: Micro-Mobility Steering Maneuver Prediction with Smartphones
Z. Han, X. Dong, L. Xu, Z. Zhu, E. Wang, Y. Nishiyama, K. Sezaki
2024 IEEE 44th International Conference on Distributed Computing Systems (ICDCS), 2024, Jersey City, New Jersey, USA. [CORE A].

[P4] Exploiting Spatial and Descriptive Information for Generative Compression
E. Hosonuma, T. Yamazaki, T. Miyoshi, A. Taya, Y. Nishiyama, K. Sezaki
2024 IEEE 21st Consumer Communications & Networking Conference (CCNC), pp. 1050–1051, 2024.

[P5] Investigating Acceptable Voice-based Notification Timings through Earable Devices: A Preliminary Field Study
M. Ito, K. Tsubouchi, N. Nishio, M. Shimosaka, A. Taya, K. Sezaki, Y. Nishiyama
Adjunct Proceedings of the 2024 ACM International Joint Conference on Pervasive and Ubiquitous Computing and the 2024 ACM International Symposium on Wearable Computing, pp. xx–xx, 2024, Melbourne, Australia. [Best Poster Award].

[P6] An Optimization Method for Indoor Trajectory Estimation from Spatially Sparse and Noisy Beacon Data
J. Maruyama, Y. Honma, Y. Nishiyama, Y. Kawahara
OHOW 2023 – The 2nd International Symposium on One Health / Infrastructure Management and sustainable built environment, pp. 6–8, 2024, Basel, Switzerland.

[P7] Experimental Evaluation Toward Mobility-Driven Model Integration Between Edges
S. Ono, T. Yamazaki, T. Miyoshi, A. Taya, Y. Nishiyama, K. Sezaki
2024 IEEE 21st Consumer Communications & Networking Conference (CCNC), pp. 610–611, 2024.

[P8] Poster: Location Awareness in AED Retrieval: An Simulation-Based Investigation
H. Peng, A. Taya, Y. Nishiyama, K. Sezaki
Proceedings of the 22nd Annual International Conference on Mobile Systems, Applications and Services, pp. 646–647, 2024, Tokyo, Japan.

[P9] Toward Detecting Student-Athletes' Condition Using Passive Mobile and Wearable Sensing
Z. Wang, A. Taya, K. Takaaki, K. Sezaki, Y. Nishiyama
Adjunct Proceedings of the 2024 ACM International Joint Conference on Pervasive and Ubiquitous Computing and the 2024 ACM International Symposium on Wearable Computing, pp. xx–xx, 2024, Melbourne, Australia. [Best Poster Award].

[P10] Deep Learning-Based Compressed Sensing for Mobile Device-Derived Sensor Data
L. Xu, Y. Nishiyama, K. Tsubouchi, K. Sezaki
Proceedings of the 33rd ACM International Conference on Information and Knowledge Management, pp. 5023–5030, 2024, Boise, ID, USA. [CORE A].

[P11] HeadSense: Visual Search Monitoring and Distracted Behavior Detection for Bicycle Riders
Z. Han, X. Dong, Y. Nishiyama, K. Sezaki
2023 IEEE 24th International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM), pp. 281–289, 2023, Boston, Massachusetts. [CORE A].

[P12] HeadMon: Head Dynamics Enabled Riding Maneuver Prediction
Z. Han, L. Xu, X. Dong, Y. Nishiyama, K. Sezaki
IEEE International Conference on Pervasive Computing and Communications (PerCom), pp. 22–31, 2023, Atlanta, USA. [CORE A*].

[P13] Enabling Block Transmission on Backoff-based Opportunistic Routing
E. Hosonuma, Y. Nishiyama, K. Sezaki, T. Miyoshi, T. Yamazaki
2023 IEEE 20th Annual Consumer Communications & Networking Conference (IEEE CCNC 2023), pp. 889–890, 2023.

[P14] Opportunistic Division and Allocation of Machine Learning Task for WSN
E. Hosonuma, N. Tanaka, T. Yamazaki, A. Taya, Y. Nishiyama, K. Sezaki, T. Miyoshi, T. Yamazaki
2023 Fourteenth International Conference on Ubiquitous and Future Networks (ICUFN), pp. 58–60, 2023.

[P15] A Trajectory Estimation Method from Spatially Sparse and Noisy Beacon Data Based on Spring Dynamics
J. Maruyama, Y. Honma, Y. Nishiyama, Y. Kawahara
Proceedings of the 10th ACM International Conference on Systems for Energy-Efficient Buildings, Cities, and Transportation, pp. 286–287, 2023, Istanbul, Turkey.

[P16] Smartwatch-Based Sensing Framework for Continuous Data Collection: Design and Implementation
Y. Nishiyama, K. Sezaki
Adjunct Proceedings of the 2023 ACM International Joint Conference on Pervasive and Ubiquitous Computing and the 2023 ACM International Symposium on Wearable Computing, pp. 620–625, 2023, Cancun, Quintana Roo, Mexico.

[P17] Cooperative Local Distributed Machine Learning Considering Communication Latency and Power Consumption
S. Ono, T. Yamazaki, T. Miyoshi, Y. Nishiyama, K. Sezaki
2023 IEEE 20th Annual Consumer Communications & Networking Conference (IEEE CCNC 2023), pp. 678–679, 2023.

[P18] Assessing Infant and Toddler Behaviors through Wearable Inertial Sensors: A Preliminary Investigation
A. Onodera, R. Ishioka, Y. Nishiyama, K. Sezaki
Companion Publication of the 25th International Conference on Multimodal Interaction, pp. 16–20, 2023, Paris, France.

[P19] Convergence Visualizer of Decentralized Federated Distillation with Reduced Communication Costs
A. Taya, Y. Nishiyama, K. Sezaki
Proceedings of IEEE Global Communications (GLOBECOM) 2023, 2023, Kuala Lumpur, Malaysia. [CORE B].

[P20] Detecting hand hygienic behaviors in-the-wild using a microphone and motion sensor on a smartwatch
H. Zhuang, L. Xu, Y. Nishiyama, K. Sezaki
Distributed, Ambient and Pervasive Interactions. Smart Living, Learning, Well-Being and Health, Art and Creativity: 11th International Conference, DAPI 2023, Held as Part of the 25th HCI International Conference, HCII 2023, 2023, Proceedings, Part II, pp. xx–xx, 2023.

[P21] DoubleCheck: Detecting Single-Hand Cycling with Inertial Measurement Unit of Smartphone
X. Dong, Z. Han, Y. Nishiyama, K. Sezaki
IEEE International Conference on Pervasive Computing and Communications (PerCom), 2022, Pisa, Italy.

[P22] DoubleCheck: Single-Handed Cycling Detection with a Smartphone
X. Dong, Z. Han, Y. Nishiyama, K. Sezaki
2022 IEEE International Conference on Systems, Man, and Cybernetics (SMC), pp. 268–274, 2022. [CORE B].

[P23] Head Dynamics Enabled Riding Maneuver Prediction
Z. Han, X. Dong, Y. Nishiyama, K. Sezaki
Proceedings of the 20th Annual International Conference on Mobile Systems, Applications and Services, pp. 557–558, 2022, Portland, Oregon.

[P24] A Micro-mobility Sensing System to Portray Riding Styles
Z. Han, Y. Nishiyama, K. Sezaki
Adjunct Proceedings of the 2022 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2022 ACM International Symposium on Wearable Computers, pp. 19–20, 2022, USA and UK.

[P25] Poster abstract: UV index estimation leveraging GNSS sensors on smartphones
R. Ishioka, Y. Nishiyama, K. Tsubouchi, K. Sezaki
Proceedings of the 20th Conference on Embedded Networked Sensor Systems, Boston, USA, pp. 863–864, 2022, New York, NY, USA.

[P26] Detecting Childcare Activities Using an Off-the-shelf Smartwatch
Y. Kasahara, Y. Nishiyama, K. Sezaki
2022 IEEE International Conference on Smart Computing (SMARTCOMP), pp. 159–161, 2022, Espoo, Finland.

[P27] Toward Measuring Conversation Duration Using a Wristwatch-type Wearable Device
Y. Komatsu, K. Shimojo, Y. Nishiyama, K. Sezaki
2022 IEEE International Conference on Smart Computing (SMARTCOMP), pp. 150–152, 2022, Espoo, Finland.

[P28] A Plug-in Memory Network for Trip Purpose Classification
S. Lyu, T. Han, Y. Nishiyama, K. Sezaki, T. Kusakabe
Proceedings of the 30th International Conference on Advances in Geographic Information Systems, 2022, Seattle, Washington. [CORE A].

[P29] MOCHA: Mobile Check-in Application for University Campuses Beyond COVID-19
Y. Nishiyama, H. Murakami, R. Suzuki, K. Oko, I. Sukeda, K. Sezaki, Y. Kawahara
The Twenty-third International Symposium on Theory, Algorithmic Foundations, and Protocol Design for Mobile Networks and Mobile Computing, 2022, Seoul, Republic of Korea.

[P30] Detecting Face-Mask Wearing Status Using Motion Sensors in Commercially Available Smartwatches
S. Ono, Y. Nishiyama, K. Sezaki
2022 IEEE International Conference on E-health Networking, Application & Services (HealthCom), pp. 107–112, 2022, Genoa, Italy.

[P31] A Preliminary Study for Detecting Visual Search Behaviors During Street Walking Using Earable Device
K. Shimojo, Z. Han, Y. Nishiyama, K. Sezaki
Adjunct Proceedings of the 2022 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2022 ACM International Symposium on Wearable Computers, pp. 19–20, 2022, USA and UK.

[P32] Poster abstract: Recursive Queueing Estimation Using Smartphone-based Acoustic Ranging
I. Sukeda, H. Murakami, Y. Nishiyama, H. Murakami, Y. Kawahara
Proceedings of the 20th Conference on Embedded Networked Sensor Systems, Boston, USA, pp. 837–838, 2022, New York, NY, USA.

[P33] Poster abstract: Room Scale Localization Improvement Utilizing Stay Time Characteristics of Each Room
R. Suzuki, Y. Nishiyama, H. Murakami, Y. Kawahara, K. Sezaki
Proceedings of the 20th Conference on Embedded Networked Sensor Systems, Boston, USA, pp. 839–840, 2022, New York, NY, USA.

[P34] Enhancing Self-Protection: What Influences Human's Epidemic Prevention Behavior during the COVID-19 Pandemic
L. Xu, Y. Nishiyama, K. Sezaki
Distributed, Ambient and Pervasive Interactions. Smart Living, Learning, Well-Being and Health, Art and Creativity: 10th International Conference, DAPI 2022, Held as Part of the 24th HCI International Conference, HCII 2022, Virtual Event, June 26 – July 1, 2022, Proceedings, Part II, pp. 336–351, 2022, Berlin, Heidelberg.

[P35] Poster abstract: Convolutional Compressed Sensing for Smartphone Acceleration Data Compression
L. Xu, Y. Nishiyama, M. Shimosaka, K. Tsubouchi, K. Sezaki
Proceedings of the 20th Conference on Embedded Networked Sensor Systems, Boston, USA, pp. 810–811, 2022, New York, NY, USA.

[P36] **Detecting Single-Hand Riding with Integrated Accelerometer and Gyroscope of Smartphone**
 X. Dong, Z. Han, Y. Nishiyama, K. Sezaki
Adjunct Proceedings of the 2021 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2021 ACM International Symposium on Wearable Computers, pp. 19–20, 2021, Virtual, USA.

[P37] **HeadSense: A Head Movement Detecting System for Micro-Mobility Riders**
 Z. Han, X. Dong, Y. Nishiyama, K. Sezaki
Adjunct Proceedings of the 2021 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2021 ACM International Symposium on Wearable Computers, pp. 26–27, 2021, Virtual, USA.

[P38] **MiMoSense: An Open Crowdsensing Platform for Micro-Mobility**
 Z. Han, H. D. Nguyen, S. Aoki, Y. Nishiyama, K. Sezaki
2021 IEEE International Conference on Intelligent Transportation (ITSC), pp. 1–6, 2021. [CORE B].

[P39] **Towards Estimating UV Exposure Using GPS Signal Strength from a Carrying Smartphone**
 S. Higuma, K. Hatai, Y. Nishiyama, K. Sezaki
2021 IEEE International Conference on Smart Computing (SMARTCOMP), pp. 299–304, 2021, Irvine, Orange County, California, USA (Virtual Workshop).

[P40] **A Run-time Dynamic Computation Offloading Strategy in Vehicular Edge Computing**
 H. D. Nguyen, S. Aoki, Y. Nishiyama, K. Sezaki
2021 IEEE 94th Vehicular Technology Conference (VTC2021-Fall), pp. 1–7, 2021, Online. [CORE B].

[P41] **An Online Task Offloading Strategy in Vehicular Edge Computing**
 H. D. Nguyen, S. Aoki, Y. Nishiyama, K. Sezaki
IEICE Society Conference 2021, 2021.

[P42] **Experience Sampling Tool for Repetitive Skills Training in Sports Using Voice User Interface**
 Y. Nishiyama, K. Sezaki
Adjunct Proceedings of the 2021 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2021 ACM International Symposium on Wearable Computers, pp. 54–55, 2021, Virtual, USA.

[P43] **Estimation of Greenhouse Gas Emission Reduction from Shared Micromobility System**
 H. Peng, Y. Nishiyama, K. Sezaki
2021 IEEE Green Energy and Smart Systems Conference (IGESSC), pp. 1–6, 2021, Long Beach, CA, USA.

[P44] **An Unsupervised Learning-based Approach for User Mobility Analysis of E-Scooter Sharing Systems**
 H. Ushijima, S. Aoki, P. Helinyi, Y. Nishiyama, K. Sezaki
2021 IEEE International Intelligent Transportation Systems Conference (ITSC), pp. 1425–1430, 2021. [CORE B].

[P45] **Towards Infectious Disease Risk Assessment in Taxis using Environmental Sensors**
 H. Ushijima, S. Ono, Y. Nishiyama, K. Sezaki
Distributed, Ambient and Pervasive Interactions, pp. 178–188, 2021, Cham.

[P46] **Towards Estimating UV Light Intensity Using GPS Signal Strength**
 S. Higuma, Y. Nishiyama, K. Sezaki
Adjunct Proceedings of the 2020 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2020 ACM International Symposium on Wearable Computers, pp. 684–687, 2020, Virtual Event, Mexico.

[P47] **iOS Crowd-Sensing Won't Hurt a Bit!: AWARE Framework and Sustainable Study Guideline for iOS Platform**
 Y. Nishiyama, D. Ferreira, Y. Eigen, W. Sasaki, T. Okoshi, J. Nakazawa, A. K. Dey, K. Sezaki
Distributed, Ambient and Pervasive Interactions, pp. 223–243, 2020, Cham.

[P48] **Using IOS for Inconspicuous Data Collection: A Real-World Assessment**
 Y. Nishiyama, D. Ferreira, W. Sasaki, T. Okoshi, J. Nakazawa, A. K. Dey, K. Sezaki
Adjunct Proceedings of the 2020 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2020 ACM International Symposium on Wearable Computers, pp. 261–266, 2020, Virtual Event, Mexico.

[P49] **SelfGuard: Semi-Automated Activity Tracking for Enhancing Self-Protection against the COVID-19 Pandemic**
 Y. Nishiyama, T. Yonezawa, K. Sezaki
Proceedings of the 18th Conference on Embedded Networked Sensor Systems, Virtual Event, Japan, pp. 780–781, 2020, New York, NY, USA.

[P50] **Mobile Sensing of Pedestrian Mobility and its Assessment**
 C. Song, M. Ito, Y. Nishiyama, K. Sezaki
IEICE Tech. Rep. Pp. 121–126, 2020.

[P51] **Challenges of Parkinson's Disease: User Experiences with STOP**
 E. Kuosmanen, V. Kan, J. Vega, A. Visuri, Y. Nishiyama, A. K. Dey, S. Harper, D. Ferreira
Proceedings of the 21st International Conference on Human-Computer Interaction with Mobile Devices and Services, 2019, Taipei, Taiwan. [CORE B].

[P52] **Using Mobile Sensing Technology for Capturing People Mobility Information**
 C. Song, M. Ito, Y. Nishiyama, K. Sezaki
Proceedings of the 3rd ACM SIGSPATIAL International Workshop on Prediction of Human Mobility, pp. 33–40, 2019, Chicago, IL, USA.

[P53] **Capturing Subjective Time as Context and It's Applications (Poster)**
 T. Yonezawa, Y. Nishiyama, K. Hiroi, N. Kawaguchi

Proceedings of the 17th Annual International Conference on Mobile Systems, Applications, and Services, pp. 647–648, 2019, Seoul, Republic of Korea.

[P54] Meal Photo SNS with Mutual Healthiness Evaluation for Improving Users' Eating Habits
Y. Eigen, Y. Nishiyama, T. Yonezawa, T. Okoshi, J. Nakazawa
Proceedings of the 2018 ACM International Joint Conference and 2018 International Symposium on Pervasive and Ubiquitous Computing and Wearable Computers, pp. 339–342, 2018, Singapore, Singapore.

[P55] Fish Species Annotation System for Environmental Detection by Marine Life as a Sensor
N. Isokawa, W. Sasaki, Y. Nishiyama, T. Okoshi, J. Nakazawa
HCI Outdoors: A CHI 2018 Workshop on Understanding Human-Computer Interaction in the Outdoor, Canada, Montreal, 2018.

[P56] Mobile-Based Monitoring of Parkinson's Disease
E. Kuosmanen, V. Kan, A. Visuri, J. Vega, Y. Nishiyama, A. K. Dey, S. Harper, D. Ferreira
Proceedings of the 17th International Conference on Mobile and Ubiquitous Multimedia, pp. 441–448, 2018, Cairo, Egypt. [CORE B].

[P57] Senbay: A Platform for Instantly Capturing, Integrating, and Restreaming of Synchronized Multiple Sensor-Data Stream
Y. Nishiyama, A. K. Dey, D. Ferreira, T. Yonezawa, J. Nakazawa
Proceedings of the 20th International Conference on Human-Computer Interaction with Mobile Devices and Services Adjunct, p. 291, 2018, Barcelona, Spain. [Honorable Mention Award].

[P58] Poster: Extensive Evaluation of Emotional Contagion on Smiling Selfies over Social Network
W. Sasaki, M. Obuchi, K. Egashira, N. Isokawa, Y. Furukawa, Y. Nishiyama, T. Okoshi, J. Nakazawa
Proceedings of the 15th Annual International Conference on Mobile Systems, Applications, and Services, p. 180, 2017, Niagara Falls, New York, USA.

[P59] Poster: NiSleep: Gamification-Friendly Quantitative Evaluation Methodology of Sleep Quality
K. Egashira, Y. Furukawa, Y. Nishiyama, T. Okoshi, J. Nakazawa, H. Tokuda
Proceedings of the 14th Annual International Conference on Mobile Systems, Applications, and Services Companion, p. 132, 2016, Singapore, Singapore.

[P60] Poster Abstract: SmileWave - Sensing and Analysis of Smile-Based Emotional Contagion over Social Network
W. Sasaki, Y. Furukawa, Y. Nishiyama, T. Okoshi, J. Nakazawa, H. Tokuda
2016 15th ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN), pp. 1–2, 2016, Vienna, Austria.

[P61] Senbay: Smartphone-Based Activity Capturing and Sharing Using Sensor-Federated Video
Y. Nishiyama, T. Okoshi, Y. Chen, T. Yonezawa, J. Nakazawa, H. Tokuda
Adjunct Proceedings of the 2015 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2015 ACM International Symposium on Wearable Computers, pp. 21–24, 2015, Osaka, Japan.

[P62] A robot control system for video streaming services by using dynamic encoded QR codes
M. Ogawa, T. Yonezawa, Y. Nishiyama, J. Nakazawa, H. Tokuda
2015 Eighth International Conference on Mobile Computing and Ubiquitous Networking (ICMU), pp. 86–87, 2015, Hakodate, Japan. [Best Poster Award].

[P63] Towards health exercise behavior change for teams using life-logging
Y. Nishiyama, T. Okoshi, T. Yonezawa, J. Nakazawa, K. Takashio, H. Tokuda
2014 IEEE 16th International Conference on e-Health Networking, Applications and Services (Healthcom), pp. 397–403, 2014, Natal, Brazil. [Best Paper Award].

[P64] DALT: Detection Algorithm of Throwing Form Changing to Prevent the Baseball Player 's Throwing Related Injuries
Y. Nishiyama, T. Ito, T. Yonezawa, J. Nakazawa, K. Takashio, H. Tokuda
UbiHealth: 6th International Workshop on Ubiquitous Health and Wellness (Part of Pervasive 2012 conference), 2012.

Proceedings (non-refereed)

[D1] Initial Investigation on Improving AED Delivery Efficiency by Encouraging Location Awareness
H. Peng, A. Taya, Y. Nishiyama, K. Sezaki
電子情報通信学会2024年総合大会, 2024, 広島大学.

[D2] 常時装着型イヤラブルデバイス利用環境における音声通知タイミング最適化に向けた基礎検討
伊藤愛香, 坪内孝太, 西尾信彦, 下坂正倫, 田谷昭仁, 瀬崎薫, 西山勇毅
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–7, 2024.

[D3] GNSS衛星ごとの信号情報に対する点群ニューラルネットワークを用いたUVインデックス推定
厚見昂, 石岡陸, 坪内孝太, 西山勇毅, 瀬崎薫
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–8, 2024. [優秀論文賞]

[D4] 学生アスリートの行動データを用いた心身のストレス・回復状態の検知に向けて:異なる時期の比較分析
王振博, 田谷昭仁, 加藤貴昭, 西山勇毅, 瀬崎薫
情報処理学会 第86回全国大会, 2024.

[D5] パッシブモバイルセンシングを用いた産後うつ症状の検知に関する一検討
顧修聞, 田谷昭仁, 瀬崎薫, 西山勇毅
情報処理学会 第86回全国大会, 2024.

[D6]　パッシブモバイルセンシングを用いた育児ノイローゼの検知に向けた基礎的調査
　　　顧修聞，田谷昭仁，西山勇毅，瀬崎薫
　　　研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–8, 2024.

[D7]　対話中の非言語行動と大規模言語モデルを活用したシームレスな質疑応答補助システムの提案
　　　伊藤愛香，厚見昴，W. Zhenbo，G. Xiuwen，田谷昭仁，西山勇毅，瀬崎薫
　　　第31回 マルチメディア通信と分散処理ワークショップ (DPSWS2023), 2023, 富山.

[D8]　ハンズフリーのデバイス操作のための汎用イヤラブルデバイスのIMUセンサーを用いた表情認識手法
　　　北森迪耶，坪内孝太，西尾信彦，西山勇毅，下坂正倫
　　　研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–8, 2023. [優秀論文賞]

[D9]　ウェアラブルデバイスを用いた乳幼児コンテクストの検知に向けた一検討
　　　小野寺文香，石岡陸，西山勇毅，瀬崎薫
　　　情報処理学会 第85回全国大会（電気通信大学）, 2023.

[D10]　ユーザの移動性を活用した地域連携型連合学習における学習モデル統合手法の評価
　　　小野翔多，山崎託，三好匠，田谷昭仁，西山勇毅，瀬崎薫
　　　第31回 マルチメディア通信と分散処理ワークショップ (DPSWS2023), 2023, 富山.

[D11]　無線アドホックネットワークにおけるユーザ参加型連合学習の実装実験
　　　小野翔多，山崎託，三好匠，田谷昭仁，西山勇毅，瀬崎薫
　　　2023 電子情報通信学会総合大会, 2023, 埼玉.

[D12]　連合学習におけるスマートフォンの電力消費量の調査
　　　小野翔多，山崎託，三好匠，田谷昭仁，西山勇毅，瀬崎薫
　　　2023年電子情報通信学会通信ソサイエティ大会, 2023, 名古屋.

[D13]　自動運転車と歩行者間の合意形成手法の基礎的検討
　　　牛島秀暢，石岡陸，田谷昭仁，西山勇毅，瀬崎薫
　　　電子情報通信学会 総合大会, 2023.

[D14]　学生アスリートの行動データを用いた心身のストレス・回復状態の検知に向けて：行動データと心理尺度との関係分析
　　　王振博，田谷昭仁，加藤貴昭，瀬崎薫，西山勇毅
　　　研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–8, 2023. [ヤングリサーチャー賞]

[D15]　異なる環境条件におけるGNSS信号強度とUVインデックスの関係
　　　石岡陸，坪内孝太，西山勇毅，瀬崎薫
　　　研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–8, 2023.

[D16]　LPWAによる屋内空間の混雑領域推定に向けた検討
　　　細沼恵里，三好匠，山崎託，西山勇毅，瀬崎薫
　　　2023年電子情報通信学会総合大会, 2023.

[D17]　広域屋内空間における人の滞在が受信信号強度に与える影響の解析
　　　細沼恵里，山崎託，三好匠，田谷昭仁，西山勇毅，瀬崎薫
　　　電子情報通信学会 情報通信マネジメント研究会（ICM）, 2023, 沖縄.

[D18]　領域的情報と説明的情報を用いた生成型画像圧縮伝送に関する初期検討
　　　細沼恵里，山崎託，三好匠，田谷昭仁，西山勇毅，瀬崎薫
　　　2023年電子情報通信学会通信ソサイエティ大会, 2023, 名古屋.

[D19]　パッシブモバイルセンシングを用いた学生アスリートのコンディション検知に向けた基礎調査
　　　西山勇毅，加藤貴昭，瀬崎薫
　　　研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–8, 2023.

[D20]　Estimating Sunlight Using GNSS Signal Strength from Smartphone
　　　Y. Nishiyama，K. Hatai，K. Tsubouchi，K. Sezaki
　　　arXiv, 2022.

[D21]　A preliminary study for monitoring hygiene behaviors by using multiple sensors on a wrist
　　　H. Zhuang，L. Xu，Y. Nishiyama，K. Sezaki
　　　研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–7, 2022.

[D22]　イアラブルデバイスを用いた街歩き時におけるユーザの道迷い状態の検知
　　　下条和暉，西山勇毅，瀬崎薫
　　　研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–6, 2022.

[D23]　腕時計型ウェアラブルデバイスを用いた会話時間計測手法の構築に向けて
　　　小松勇輝，下条和暉，西山勇毅，瀬崎薫
　　　情報処理学会 第84回全国大会（愛媛大学）, 2022.

[D24]　無線マルチホップ連合学習へ向けた実装実験
　　　小野翔多，三好匠，山崎託，西山勇毅，瀬崎薫
　　　電子情報通信学会ソサイエティ大会, 2022, オンライン.

[D25]　移動体通信併用型MANETにおける端末密度を用いた中継領域制御
　　　小野翔多，山崎託，三好匠，西山勇毅，瀬崎薫
　　　情報通信マネジメント研究会 (ICM), 2022.

[D26] ウェアラブルデバイスのマイクを用いたマスク装着状態の検知に向けて
　　　小野翔多，西山勇毅，瀬崎薫
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–8, 2022.

[D27] スマートウォッチを用いたマスク装着の促進手法
　　　小野翔多，西山勇毅，瀬崎薫
情報処理学会 IoT行動変容学研究グループ キックオフシンポジウム, pp. 56–57, 2022.

[D28] タクシー車両を用いたマイクロモビリティ再配置
　　　牛島秀暢，西山勇毅，瀬崎薫
情報処理学会 第84回全国大会（愛媛大学）, 2022.

[D29] スマートフォンのGNSSセンサを用いたUVインデックス推定
　　　石岡陸，坪内孝太，西山勇毅，瀬崎薫
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–7, 2022. [優秀論文賞]

[D30] ウェアラブルデバイスを用いた子育てコンテキストの検知に向けて
　　　笠原有貴，西山勇毅，瀬崎薫
研究報告ヒューマンコンピュータインタラクション研究会（CHI）, 2022, 石垣島.

[D31] LPWAによる屋内混雑度推定に向けた基礎検討
　　　細沼恵里，三好匠，山崎託，西山勇毅，瀬崎薫
電子情報通信学会ソサイエティ大会, 2022, オンライン.

[D32] Face-Touch Detection with Smartwatch by CNN: An Experimental Lab Study
　　　荘昊昱，韓増易，西山勇毅，瀬崎薫
電子情報通信学会ソサイエティ大会, 2022, オンライン.

[D33] スマートフォンを用いたベビーカーのコンテキスト検知に向けた一検討
　　　西山勇毅，瀬崎薫
電子情報通信学会総合大会（オンライン）, 2022.

[D34] Using Turning Data for Micro-Mobility Rider Identification
　　　韓増易，西山勇毅，瀬崎薫
電子情報通信学会ソサイエティ大会, 2022, オンライン.

[D35] 常時装着型イアラブルデバイスにおける割り込み可能タイミングの検討
　　　下条和暉，西山勇毅，瀬崎薫
CSIS DAYS 2021, p. 40, 2021.

[D36] 集約型都市におけるライドシェアサービス導入効果のシミュレーション
　　　小池優太郎，西山勇毅，瀬崎薫
CSIS DAYS 2021, p. 33, 2021.

[D37] 移動体通信併用形MANETにおける経路要求送信回数に基づく経路構築手法
　　　小野翔多，山崎託，三好匠，西山勇毅，瀬崎薫
2021 電子情報通信学会ソサイエティ大会, 2021, オンライン.

[D38] スマートウォッチを用いた子育て行動の推定に向けた一検討
　　　笠原有貴，西山勇毅，瀬崎薫
計測自動制御学会 計測部門スマートセンシングシステム部会, 2021.

[D39] 感染症流行時におけるスマートフォンを用いた 大学生の身体活動量分析
　　　西山勇毅，中縁嗣，野田悠加，柿野優衣，羽柴彩月，山田佑亮，佐々木航，大越匡，中澤仁，森将輝，水鳥寿思，塩田琴美，永野智久，東海林祐子，加藤貴昭
arXiv, 2021.

[D40] イヤラブルデバイスを用いた身体感覚記録・利活用システムの構築に向けて
　　　西山勇毅，瀬崎薫
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–8, 2021. [優秀論文賞]

[D41] 部屋毎の滞在時間特性を考慮した頑健な滞在場所推定手法
　　　鈴木凌斗，村上弘晃，西山勇毅，川原圭博，瀬崎薫
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–7, 2021.

[D42] 感染症予防行動を促進させるインセンティブモデルに関する一検討
　　　陳美怡，幡井皓介，西山勇毅，瀬崎薫
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–7, 2021.

[D43] 感染症予防行動を促進させるインセンティブモデルの構築に向けて
　　　陳美怡，幡井皓介，西山勇毅，瀬崎薫
第20回情報科学技術フォーラム（FIT2021）, 2021, オンライン.

[D44] BLEビーコンを用いた屋内位置推定システムの設計と実装
　　　山下陸，西山勇毅，小松寛弥，川原圭博
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–7, 2020.

[D45] GPS信号受信状態を用いた紫外線量推定手法の検討
　　　日隈壮一郎，西山勇毅，瀬崎薫

研究報告ユビキタスコンピューティングシステム (UBI), pp. 1–7, 2020. 優秀論文賞

[D46] モバイルコンピューティングによるエモーショナル・イーティングの検知
　栄元優作，佐々木航，<u>西山勇毅</u>，大越匡，中澤仁
研究報告ユビキタスコンピューティングシステム (UBI), pp. 1–8, 2020.

[D47] 環境センサを用いたタクシー車室内における感染症リスク評価に関する一検討
　牛島秀暢，<u>西山勇毅</u>，小野翔多，瀬崎薫
研究報告モバイルコンピューティングと新社会システム研究会（MBL）, pp. 1–6, 2020, オンライン.

[D48] Non-Negative Tensor Factrization を用いたドックレス型マイクロモビリティの利用形態分類手法の検討
　牛島秀暢，青木俊介，<u>西山勇毅</u>，瀬崎薫
研究報告高度交通システムとスマートコミュニティ（ITS）, pp. 1–8, 2020.

[D49] スマートフォンセンサを用いた気分情報を基にした都市空間評価手法に向けて
　神村潤，<u>西山勇毅</u>，瀬崎薫
電子情報通信学会 電子情報通信学会総合大会, 2020, 広島大学東広島キャンパス.

[D50] In-the-Wild実験におけるiOS用モバイルセンシングフレームワークの性能評価
　<u>西山勇毅</u>，佐々木航，栄元優作，本木悠介，大越匡，中澤仁，瀬崎薫
電子情報通信学会技術研究報告: 信学技報, pp. 127–132, 2020, 大濱信泉記念館（石垣島）.

[D51] 人の限定合理性を超越した行動変容支援に向けた情報プラットフォームの設計
　大越匡，<u>西山勇毅</u>，佐々木航，栄元優作，中澤仁
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–6, 2019.

[D52] HealthFight: 多数決を用いた食習慣改善ソーシャルメディア
　栄元優作，江頭和輝，河野慎，<u>西山勇毅</u>，大越匡，米澤拓郎，高汐一紀，中澤仁
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–7, 2017.

[D53] SpoTrip : 観光客リピータ化促進のための隠れスポット情報提供システムの評価
　片山晋，礒川直大，小渕幹夫，<u>西山勇毅</u>，大越匡，米澤拓郎，中澤仁，高汐一紀，徳田英幸
電子情報通信学会技術研究報告 = IEICE technical report : 信学技報, pp. 157–164, 2017.

[D54] Likeyboard: ライフログデータ共有簡易化のためのスマートフォンキーボードインタフェース
　石川伶，佐々木航，<u>西山勇毅</u>，大越匡，米澤拓郎，中澤仁，高汐一紀，徳田英幸
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–6, 2017.

[D55] TalkingNemoPad : Aquarium Fish Talks Its Mind for Breeding Support through Your iPad
　礒川直大，<u>西山勇毅</u>，大越匡，中澤仁，高汐一紀，徳田英幸
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–8, 2017.

[D56] MyTime : タイムマネジメントの促進を目的としたアプリケーション使用時間自動記録システムの提案
　小出粋玄，<u>西山勇毅</u>，大越匡，米澤拓郎，高汐一紀，中澤仁，徳田英幸
電子情報通信学会技術研究報告 = IEICE technical report : 信学技報, pp. 177–182, 2016.

[D57] MyFactor : ライフログを用いたユーザの内面状態に関する因子分析
　小渕幹夫，古川侑紀，<u>西山勇毅</u>，大越匡，米澤拓郎，高汐一紀，中澤仁，徳田英幸
電子情報通信学会技術研究報告, pp. 39–44, 2016.

[D58] NiSleep: ゲーミフィケーションを適用可能な睡眠評価
　江頭和輝，古川侑紀，<u>西山勇毅</u>，大越匡，米澤拓郎，中澤仁，高汐一紀，徳田英幸
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–6, 2016.

[D59] Aqua Mapping: 水槽を介した観賞魚とのインタラクションシステム
　礒川直大，<u>西山勇毅</u>，大越匡，米澤拓郎，中澤仁，高汐一紀，徳田英幸
研究報告ユビキタスコンピューティングシステム（UBI）, pp. 1–8, 2015. [優秀論文賞]

[D60] Senbay : 活動促進のためのスマートフォンを利用したセンサデータ統合型動画記録・共有・分析プラットフォーム
　<u>西山勇毅</u>，米澤拓郎，中澤仁，徳田英幸
知的環境とセンサネットワーク研究会(ASN), 電子情報通信学会技術研究報告 = IEICE technical report : 信学技報, pp. 49–54, 2015, 長野.
[若手研究奨励賞]

[D61] 加速度センサのみを用いた移動手段判定アルゴリズムの評価
　古川侑紀，<u>西山勇毅</u>，大越匡，中澤仁，高汐一紀，徳田英幸
情報処理学会研究報告. MBL, [モバイルコンピューティングとユビキタス通信研究会研究報告], pp. 1–7, 2014.

[D62] 動画二次元コードを用いたウェアラブルセンシングのための情報記録・配信手法
　米澤拓郎，<u>西山勇毅</u>，小川正幹，中澤仁，徳田英幸
第19回人間情報学会, 2014.

[D63] チームの動機づけにおける個人の貢献度の可視化に関する一検討
　<u>西山勇毅</u>，米澤拓郎，中澤仁，徳田英幸
情報処理学会研究報告. UBI, [ユビキタスコンピューティングシステム], pp. 1–8, 2013.

[D64] 野球選手の投球動作変化を用いた疲労度取得手法の提案 : 投球障害予防支援システム構築に向けて
　<u>西山勇毅</u>，瀧本拓哉，米澤拓郎，中澤仁，高汐一紀，徳田英幸
電子情報通信学会技術研究報告. USN, ユビキタス・センサネットワーク : IEICE technical report, pp. 119–125, 2011.

Contribution

Affiliation

Information Processing Society of Japan (IPSJ) Member

SIG Ubiquitous Computing System (UBI) - Steering Committee Apr. 2011 - Current

The Society of Instrument and Control Engineers (SICE) Member

SIG Smart Sensing System (SSS) - Steering Committee Apr. 2020 - Current

Association for Computing Machinery (ACM) Member

Apr. 2013 - Current

Institute of Electrical and Electronics Engineers (IEEE) Member

Apr. 2013 - Current

Japan Society of Physical Education, Health and Sport Sciences Member

Apr. 2022 - Current

Japan Society for Software Science and Technology Member

Feb. 2023 - Current

Conference Organizer

2025	**Sponsorship Chair**, The 23rd ACM International Conference on Mobile Systems, Applications, and Services (ACM MobiSys2025)	Anaheim, California, US
2025	**Program Committee**, The 7th International Conference on Activity and Behavior Computing (ABC2025)	Khalifa University, Abu Dhabi, UAE (Hybrid)
2024	**Technical Program Committee**, IEEE International Conference on E-health Networking, Application & Services (HealthCom 2024)	Nara, Japan
2024	**Program Committee**, 26th ACM International Conference on Multimodal Interaction (ICMI 2024)	Costa Rica
2024	**Technical Program Committee**, 14th International Conference on the Internet of Things (IoT 2024)	Oulu, Finland
2024	**Associate Editors**, The Society of Instrument and Control Engineers (SICE) Annual Conference 2024	Kochi, Japan
2024	**Local Chair**, The 22nd ACM International Conference on Mobile Systems, Applications, and Services (ACM MobiSys2024)	Tokyo, Japan
2024	**Program Committee**, The 6th International Conference on Activity and Behavior Computing (ABC2024)	Nakatsu and Kitakyushu, Kyushu, Japan (Hybrid)
2024	**Technical Program Committee**, 25th IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM)	Western, Australia
2023	**Associate Editors**, The Society of Instrument and Control Engineers (SICE) Annual Conference 2023	Tsu, Japan
2023	**Publicity Chair**, The 13th International Conference on the Internet of Things (IoT2023)	Nagoya, Japan
2022	**Program Committee**, The 4th International Conference on Activity and Behavior Computing (ABC2022)	London, United Kingdom (Hybrid)
2022	**Associate Editors**, The Society of Instrument and Control Engineers (SICE) Annual Conference 2022	Kumamoto, Japan
2021	**Publicity Chair**, The 19th ACM International Conference on Mobile Systems, Applications, and Services (ACM MobiSys2021)	Mars, Solar System
2021	**Web Chair**, The 13th International Conference on Mobile Computing and Ubiquitous Networking (ICMU2021)	Tokyo, Japan
2021	**Program Committee**, The 3rd International Conference on Activity and Behavior Computing (ABC2021)	Bangkok, Thailand (Online)
2020	**Publicity Chair**, The 18th ACM Conference on Embedded Networked Sensor Systems (ACM SenSys2020)	Tokyo, Japan
2019	**Program Committee for Late Breaking Results**, The 21st International Conference on Human-Computer Interaction with Mobile Devices and Services (ACM MobileHCI2019)	Taipei, Taiwan
2018	**Technical Program Committee**, The 9th International Conference on Mobile Computing, Application and Services (EAI MobiCASE2018)	Osaka, Japan
2018	**Co-organizer**, Ubiquitous Mobile Sensing: Behaviour, Mood, and Environment (colocated workshop with ACM UbiComp 2018)	Singapore
2018	**Web Chair**, The 24th IEEE International Conference Embedded and Real-Time Computing Systems and Applications (IEEE RTCSA2018)	Hakodate, Japan
2017	**Co-organizer**, The 4th International Workshop on Ubiquitous Mobile Instrumentation (UbiMI2017) (collocated with ACM UbiComp 2017)	Maui, Hawaii, USA
2016	**Co-organizer**, The 3rd International Workshop on Ubiquitous Mobile Instrumentation (UbiMI2016) (collocated with ACM UbiComp 2016)	Heidelberg, Germany

Editorial Board

2024	**Editorial Board Member**, Journal of Information Processing (JIP) [Special Issue of Ubiquitous Computing Systems (XIII)]
2023	**Editorial Board Member**, Journal of Information Processing (JIP) [Special Issue of Ubiquitous Computing Systems (XII)]
2022	**Editorial Board Member**, Journal of Information Processing (JIP) [Special Issue of Ubiquitous Computing Systems (XI)]
2022	**Associate Editor**, Transactions of the Society of Instrument and Control Engineers
2021	**Associate Editor**, Transactions of the Society of Instrument and Control Engineers
2020	**Editorial Board Member**, Journal of Information Processing (JIP) [Special Issue of Ubiquitous Computing Systems (X)]
2020	**Associate Editor**, Transactions of the Society of Instrument and Control Engineers

Reviewer (Journal)

- **ACM IMWUT**: Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies [2018, 2019, 2020, 2021, 2022, 2023, 2024]

- **IJHCS**: International Journal of Human-Computer Studies (Elsevier) [2021, 2022]

- **JCMSI**: Journal of Control, Measurement, and System Integration (SICE JCMSI) [2021, 2022]

- **MDPI Sensors** [2021]

Reviewer (Conference, workshop, and poster/demo papers)

- **ACM ICMI**: The ACM International Conference on Multimodal Interaction [2023,2024]

- **ACII**: International Conference on Affective Computing and Intelligent Interaction [2024]

- **IEEE WoWMoM**: IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks [2024]

- **IEEE HealthCom**: IEEE International Conference on E-health Networking, Application & Services [2024]

- **IoT**: The International Conference on the Internet of Things [2023, 2024]

- **ABC**: International Conference on Activity and Behavior Computing [2022, 2023, 2024]

- **ACM MobileHCI**: The ACM International Conference on Mobile Human-Computer Interaction [2022]

- **IEEE SMC**: IEEE International Conference on Systems, Man, and Cybernetics [2022]

- **ACM UbiComp (Poster & Demo)**: The ACM international joint conference on pervasive and ubiquitous computing [2021, 2022, 2023, 2024]

- **ACM CHI (WiP)**: The ACM CHI Conference on Human Factors in Computing Systems is the premier international conference of Human-Computer Interaction[2022]

- **ACM SenSys (Poster & Demo)**: The ACM International Conference on Mobile Systems, Applications, and Services [2019]

- **ACM MUM (Rising Start Forum)**: The ACM International Conference on Mobile and Ubiquitous Multimedia [2018]

- **ACM MobiSys (Rising Stars Forum)**: ACM International Conference on Mobile Systems, Applications, and Services [2018]

- **AppLens**: The 1st Workshop on Mining and Learning from Smartphones Apps for Users (ACM UbiComp's Workshop), [2018]

- **EmotionAware**: International Workshop on Emotion Awareness for Pervasive Computing with Mobile and Wearable Devices (IEEE PerCom's Workshop) [2018]

- **UbiMI**: International Workshop on Ubiquitous Mobile Instrumentation (ACM UbiComp's Workshop) [2016, 2017]

Development

SelfGuard: Self-tracking Application for Promoting Infection Prevention Behavior

AppStore

iOS App

2020-Current

`https://sites.google.com/g.ecc.u-tokyo.ac.jp/selfguard/`

MOCHA: Mobile Check-in Application for Safe and Reassuring Campus Life

AppStore/GoolgePlay

Flutter based iOS/Android Appn

2020-Current

`https://mocha.t.u-tokyo.ac.jp/`

SFC-GO (Going-Well Online) : Remote Physical Education Support Application for SFC (Keio University Shonan Fujisawa Campus)

TestFlight

Flutter based iOS App

2020-2022

`https://www.jn.sfc.keio.ac.jp/news/2020/07/06/2094/`

eSense Client

GitHub/AppStore

iOS App & Library

2018-Current

- AppStore: `https://apps.apple.com/jp/app/esense-client/id1494692894`
- GitHub: `https://github.com/tetujin/ESense`

SenbayKit: A Platform for Instantly Capturing, Integrating, and Restreaming of Synchronized Multiple Sensor-data Streams

GitHub

iOS/Android/macOS/Web-browser Library

2017-Current

- Homepage: `http://www.senbay.info`
- SenbayKit-iOS: `https://github.com/tetujin/SenbayKit`
- SenbayKit-macOS: `https://github.com/tetujin/SenbayKit-macos`
- SenbayKit-CLI: `https://github.com/tetujin/SenbayKit-CLI`
- SenbayKit-Browser: `https://github.com/tetujin/SenbayKit-Browser`

STOP-PD: Sentient Tracking of Parkinson's

GitHub/AppStore

iOS App

2018-2020

`https://github.com/awareframework/STOP-iOS`

AWAREFramework-iOS: AWARE Framework for iOS

GitHub/CocoaPods

iOS Library

2018-Current

- CocoaPods: `https://cocoapods.org/pods/AWAREFramework`
- GitHub: `https://github.com/tetujin/AWAREFramework-iOS`

AWARE Client iOS: Mobile Context Instrumentation Framework

GitHub/AppStore

iOS App

2015-Current

- Homepage: `http://www.awareframework.com/`
- GitHub: `https://github.com/tetujin/aware-client-ios-v2`
- AppStore: `https://apps.apple.com/jp/app/aware-client-v2/id1455986181`

Skills

DevOps	GCP, Firebase, AWS, git, Travis
Platform	iOS, macOS, watchOS, Android, Linux-based OS (Ubuntu, CentOS, Raspberry Pi等), Jetson, ESP32 (M5 Stack等)
Back-end	Flask, FastAPI, Node.js, REST API, SQL&NoSQL-based DB, Realm
Front-end	Flutter, HTML5
Programming	Python, Swift, Dart2, Objective-C, C, JAVA, JavaScript
Languages	English, Japanese