

Takashi Amesaka

07041690957 | athm2606@yahoo.ne.jp | Yokohama, Kanagawa

Experience

Keio University | Yokohama, Kanagawa

Researcher | 04/2023 - Present

Research assistant

JSPS | Yokohama, Kanagawa

Research Fellow | 04/2023 - Present

Japan Society for the Promotion of Science research fellowship. Enrolled at Keio University.

JSPS | Tsukuba, Ibaraki

Research Fellowship | 04/2021 - 03/2023

Japan Society for the Promotion of Science research fellowship. One paper in IMWUT within the term.

Skills

Programming, Python, Machine Learning, Wearable Computing Pilot Study

Education

University of Tsukuba | Tsukuba, Ibaraki

Wearable Computing | 03/2023

Ph.D. (Engineering)

- Research Group Director's Award, Research Group of Systems and Information Engineering, University of Tsukuba
- Meikeikai Award, General Incorporated Association
- Preliminary Doctoral Dissertation Report of the Research Group https://note.com/jpsj/n/n0bb97746cfce?sub_rt=share_pw

Hokkaido University | Sapporo, Hokkaido

Computer Science and Engineering | 03/2020

Received Master's Degree

Awards

IPSJ Yamashita SIG Research Award, IPSJ, 2023., Best Paper Award (IPSJ SIGUBI 64, 77), Best Paper Award/Best Presentation Award (IPSJ DICOMO 2022)

Grant

- Grant-in-Aid for JSPS Fellows(PD) "Establishing a Micro Gesture Input Method for Healable Devices" (2023.04-2026.03) ¥4,680,000
- Grant-in-Aid for JSPS Fellows(DC2) "Robust Active Acoustic Sensing Method and Its Application to Garment Interface" (2021.04-2023.03) ¥1,500,000
- Tateishi Science and Technology Foundation(Research Grant (C)) "Establishment of smart device method for sportswear using acoustic sensing" (2021.04-2023.03) ¥1,000,000

Media

"Hand gesture input using earphone "sound leakage" developed by University of Tsukuba and Hokkaido University". IT Media

News / 「イヤフォンの“音漏れ”を利用したハンドジェスチャー入力 筑波大と北海道大が開発」

<https://www.itmedia.co.jp/news/articles/2301/05/news025.html>

Interests

Research on wearable computers. In particular, acoustic sensing and hearables (smart earbuds).

Publications

Journal

1. Takashi Amesaka, Hiroki Watanabe, Masanori Sugimoto, and Buntarou Shizuki.
Gesture Recognition Method Using Acoustic Sensing on Usual Garment,
Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), Vol. 6, No. 2, Article 41, 2022. [\[ACM\]](#)
2. Takashi Amesaka, Hiroki Watanabe, and Masanori Sugimoto.
Ear Canal Transfer Function-based Facial Expression Recognition,
Journal of Information Processing, Vol. 61, No. 8, pp.1333-1342, 2020.

International Conference

1. Takashi Amesaka, Hiroki Watanabe, Masanori Sugimoto, Yuta Sugiura, and Buntarou Shizuki.
User Authentication Method for Hearables Using Sound Leakage Signals,
In Proceedings of ISWC 2023, Cancun, Quintana Roo, Mexico, 2023 (to appear)
2. Takashi Amesaka, Hiroki Watanabe, and Masanori Sugimoto.
Facial Expression Recognition Using Ear Canal Transfer Function,
In Proceedings of ISWC 2019, London, UK, pp.1-9, 2019. [\[ACM\]](#)

Others

Teaching Experiences

- Hokkaido University International Student Tutors
- Hokkaido University, Department of Information Science and Engineering "Information Science and Engineering Experiments I & II

Committee

- SIG UBI Steering Committee Members (2023-)

Review

- The ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)

Conference Service

- Interaction-IPSJ 2024 web committee