

Akira Matsuda

✉ akira.matsuda.ut@gmail.com

🌐 <https://www.0x0c.me>

in akira-matsuda-425181140



Research Interests

- My role in Human Computer Interaction is to create a future in which transfer our personality to communicate or collaborate remotely with high engagement. I am focusing not only on communication by language but also on communication using nonverbal information such as eye contact, facial expression, and body cues.

Keywords: Remote Collaboration; Telepresence; Nonverbal Communication; Human Augmentation

Professional / Work Experiences

- 2017 – 2019 Assistant Researcher Sony Computer Science Laboratories, Inc. (Sony CSL), Tokyo, Japan
- FEBRUARY 2017 – MARCH 2017 Research Internship National Institute of Advanced Industrial Science and Technology (AIST), Ibaraki, Japan
- SEPTEMBER 2015 Internship Sony Corporation, Tokyo, Japan
- 2015 – 2017 Software Engineer Yukai Engineering Inc., Tokyo, Japan iOS app development, Server back-end development, Embedded software development
- 2015 – Software Engineer Link-U, Inc., Tokyo, Japan iOS app development, UI/UX design
- MARCH 2011 – JUNE 2011 Software Engineer Lunascape Corporation, Inc., Tokyo, Japan iOS app development
- NOVEMBER 2010 – MARCH 2012 Software Engineer Galapagos, Inc., Inc., Tokyo, Japan iOS app development

Education

- 2017 – Ph.D. candidate in INTERDISCIPLINARY INFORMATION STUDIES (APPLIED COMPUTER SCIENCE) Graduate School of Interdisciplinary Information Studies **The University of Tokyo**, Tokyo, Japan, Supervisor: Jun Rekimoto
- 2015 – 2017 M.A.S. in INTERDISCIPLINARY INFORMATION STUDIES (APPLIED COMPUTER SCIENCE) Graduate School of Interdisciplinary Information Studies **The University of Tokyo**, Tokyo, Japan, Supervisor: Jun Rekimoto
- 2011 – 20015 B.E. in COMPUTER SCIENCE School of Engineering **Shibaura Institute of Technology**, Tokyo, Japan, Supervisor: Hiroyuki Nakamura

Academic Qualification

- 2017 M.A.S. in INTERDISCIPLINARY INFORMATION STUDIES Graduate School of Interdisciplinary Information Studies, **The University of Tokyo**, Tokyo, Japan
- 2015 B.E. in COMPUTER SCIENCE School of Engineering, **Shibaura Institute of Technology**, Tokyo, Japan


Academic Services

Reviewer Experience








2017  35th ACM Conference on Human Factors in Computing Systems (ACM CHI 2017)

Research Publications

Journal Articles

- 1 A. Matsuda, T. Okuzono, H. Nakamura, H. Kuzuoka, and J. Rekimoto, "A surgical scene replay system for learning gastroenterological endoscopic surgery skill by multiple synchronized-video and gaze representation," *Proc. ACM Hum.-Comput. Interact.*, vol. 5, no. EICS, May 2021.  DOI: 10.1145/3461726.

Conference Proceedings

- 1 A. Matsuda, K. Nozawa, K. Takata, A. Izumihara, and J. Rekimoto, "Hapticpointer: A neck-worn device that presents direction by vibrotactile feedback for remote collaboration tasks," in *Proceedings of the Augmented Humans International Conference*, ser. AHs '20, Kaiserslautern, Germany: Association for Computing Machinery, 2020, ISBN: 9781450376037.  DOI: 10.1145/3384657.3384777.
- 2 A. Matsuda, K. Nozawa, and J. Rekimoto, "Jackin neck: A neckband wearable telepresence system designed for high comfortability," in *Proceedings of the 2018 ACM International Conference on Interactive Surfaces and Spaces*, ser. ISS '18, Tokyo, Japan: Association for Computing Machinery, 2018, pp. 415–418, ISBN: 9781450356947.  DOI: 10.1145/3279778.3279917.
- 3 T. Takahashi, K. Shiro, A. Matsuda, *et al.*, "Augmented jump: A backpack multirotor system for jumping ability augmentation," in *Proceedings of the 2018 ACM International Symposium on Wearable Computers*, ser. ISWC '18, Singapore, Singapore: Association for Computing Machinery, 2018, pp. 230–231, ISBN: 9781450359672.  DOI: 10.1145/3267242.3267270.
- 4 A. Matsuda, T. Miyaki, and J. Rekimoto, "Scalablebody: A telepresence robot that supports face position matching using a vertical actuator," in *Proceedings of the 8th Augmented Human International Conference*, ser. AH '17, DOI:http://doi.acm.org/10.1145/3041164.3041182, Silicon Valley, California: ACM, 2017, 13:1–13:9, ISBN: 978-1-4503-4835-5.  DOI: 10.1145/3041164.3041182.
- 5 S. Yamashita, A. Matsuda, N. Hamanishi, S. Suwa, and J. Rekimoto, "Demulti display: A multiplayer gaming environment for mitigating the skills gap," in *Proceedings of the Eleventh International Conference on Tangible, Embedded, and Embodied Interaction*, ser. TEI '17, DOI:http://doi.acm.org/10.1145/3024969.3025074, Yokohama, Japan: ACM, 2017, pp. 457–463, ISBN: 978-1-4503-4676-4.  DOI: 10.1145/3024969.3025074.
- 6 A. Kadomura, A. Matsuda, and J. Rekimoto, "Casper: A haptic enhanced telepresence exercise system for elderly people," in *Proceedings of the 7th Augmented Human International Conference 2016*, ser. AH '16, DOI:http://doi.acm.org/10.1145/2875194.2875197, Geneva, Switzerland: ACM, 2016, 2:1–2:8, ISBN: 978-1-4503-3680-2.  DOI: 10.1145/2875194.2875197.
- 7 A. Matsuda and J. Rekimoto, "Scalablebody: A telepresence robot supporting socially acceptable interactions and human augmentation through vertical actuation," in *Proceedings of the 29th Annual Symposium on User Interface Software and Technology*, ser. UIST '16 Adjunct, DOI:http://doi.acm.org/10.1145/2984751.2985718, Tokyo, Japan: ACM, 2016, pp. 103–105, ISBN: 978-1-4503-4531-6.  DOI: 10.1145/2984751.2985718.
- 8 A. Matsuda, M. Sugaya, and H. Nakamura, "Luminous device for the deaf and hard of hearing people," in *Proceedings of the Second International Conference on Human-agent Interaction*, ser. HAI '14, DOI:http://doi.acm.org/10.1145/2658861.2658922, Tsukuba, Japan: ACM, 2014, pp. 201–204, ISBN: 978-1-4503-3035-0.  DOI: 10.1145/2658861.2658922.

Skills

Languages	■ JAPANESE: Native
	■ ENGLISH: Intermediate (TOEIC score 735/990, 2014)
Programming Language	■ C, C++, Objective-C, Swift, Processing, PHP
Platform / Framework	■ openFrameworks, macOS, Arduino
Technology	■ Bluetooth Low Energy
Software	■ Xcode, Sketch, Adobe Illustrator, Adobe Premiere Pro

Awards and Grants

Awards

- 2022 ■ **Google Open Source Peer Bonus Award**, <https://opensource.googleblog.com/2022/03/Announcing-First-Group-of-Google-Open-Source-Peer-Bonus-Winners-in-2022.html>.
- 2020 ■ **Honorable Mentions Award**, Augmented Humans International Conference, <https://dl.acm.org/doi/10.1145/3384657.3384777>

Grants

- 2017 ■ Project Fund in Summer Founders Program organized by Division of University Corporate Relations (1,500 dolls)

References

Prof. Jun Rekimoto

Interfaculty Initiative in Information Studies, The University of Tokyo, Tokyo, Japan
<https://www.sonyosl.co.jp/person/rekimoto.html>

Dr. Takashi Miyaki

Interfaculty Initiative in Information Studies, The University of Tokyo, Tokyo, Japan
<https://sites.google.com/site/miyakitakashi/>

Prof. Hiroyuki Nakamura

Dept. of Humanity/Social Sciences, Shibaura Institute of Technology, Tokyo, Japan
<mailto:nkmr@shibaura-it.ac.jp>

Dr. Jun Kato

National Institute of Advanced Industrial Science and Technology (AIST), Ibaraki, Japan
<http://junkato.jp/resume.html>