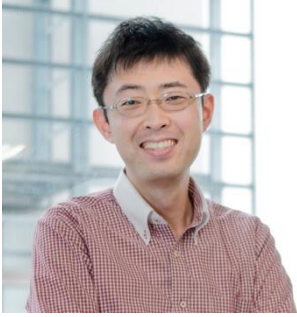


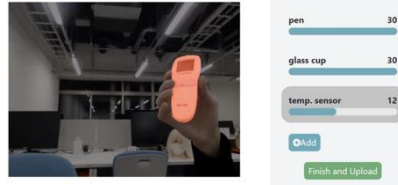
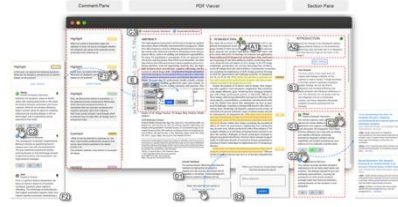
At the Interactive Intelligent Systems Laboratory (IIS Lab / Yatani Laboratory), our mission is to improve people's well-being through intellectual activities and healthy life enhanced by interactive systems with intelligence behind we design, implement, and evaluate. We currently focus on the following research areas while broadly exploring the creation of new relationships between humans, information technology, and AI.



Human-AI Interaction & Extraheric AI

With the emergence of generative AI, artificial intelligence is used in a broad range of applications. However, excessive reliance on AI can lead users to lose self-efficacy and the essential skills required for their own intellectual productivity. We propose a new Human-AI Interaction framework called extraheric AI, which maintains people to take the central role of thinking while AI stimulates their higher-order thinking.

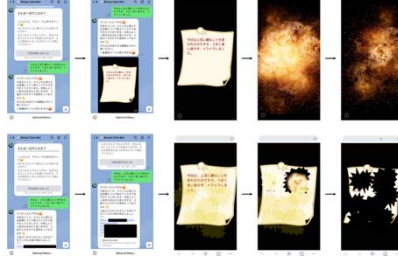
- An interactive system to support critical paper reading through discussions with multiple AI agents
- An interview practice support using alter-ego AI agents
- In-situ object-aware interactive machine teaching



Mental Well-being Support

Mental well-being is a global issue. We research technology and design for supporting people's mental well-being using AI.

- Motivational interviewing with multiple AI agents
- Investigations on expressive writing considering distances between caregivers and care recipients
- Mobile expressive writing systems for stress relief



Usable security and literacy enhancement

As users increasingly interact with information technology in various contexts, the instances where their privacy and security are threatened are also on the rise. We develop systems and design that not only promote security across both cyber and physical worlds but also enhance user literacy.

- Large-scale real-world studies on nudges to inform privacy/safety-concerned actions on an SNS for adolescents
- Datasets and obfuscation methods using image generation for image privacy
- Dual-purpose interfaces of bot detection for Internet literacy training



Interdisciplinarity is our hallmark.

We are over 20 members, including students, visiting researchers, and interns, with approximately half coming from overseas. With members from diverse backgrounds. We strive to provide an environment where researchers can tackle various challenges while embracing diversity. We actively promote the international circulation of talent and interdisciplinary collaborative research.

Webpages: <https://iis-lab.org>, <https://aspire-mwi.org>

