

Hiroshi Ishii



JEROME B. WIESNER PROFESSOR OF MEDIA ARTS AND SCIENCES
 ASSOCIATE DIRECTOR OF MIT MEDIA LABORATORY
 DIRECTOR OF TANGIBLE MEDIA GROUP
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Summary

Hiroshi Ishii is the Jerome B. Wiesner Professor of Media Arts and Sciences at the [MIT Media Laboratory](#). After joining the Media Lab in October 1995, he founded the [Tangible Media Group](#) to make digital tangible by giving physical form to digital information and computation. Here, he pursues his [visions of Tangible Bits \(1997\) and Radical Atoms \(2012\)](#) that will transcend the Painted Bits of GUIs (Graphical User Interfaces), the current dominant paradigm of HCI (Human-Computer Interaction).

He is recognized as a founder of "Tangible User Interfaces (TUI)," a new research genre based on his [CHI '97 "Tangible Bits" paper](#), which led to the spinoff [ACM International Conference on Tangible, Embedded and Embodied Interaction \(TEI\)](#) from 2007. In addition to academic conferences, "Tangible Bits" and "Radical Atoms" were exhibited at the [NTT ICC \(2000\)](#) in Tokyo, Japan, at the [Ars Electronica Center \(2001-2003, 2016-2019\)](#) in Linz, Austria, and many other international arts & design venues. For his Visionary works, he was awarded [tenure from MIT in 2001](#), elected to the [CHI Academy in 2006](#), awarded the [SIGCHI Lifetime Research Award in 2019](#), and named [ACM Fellow in 2022](#).

Education

1992 Ph.D.	Hokkaido University, Computer Engineering Dissertation: "Study on Groupware Design"
1980 M.Sc.	Hokkaido University, Computer Engineering Thesis: "Simulation Study of TSS-Batch Computer Systems"
1978 B.Sc.	Hokkaido University, Electronic Engineering

Honors and awards

2022	ACM Fellow for his contributions to Tangible User Interfaces and Human-Computer Interaction.
2019	SIGCHI Lifetime Research Award for his fundamental and influential research contributions to the field of human-computer interaction
2006	CHI Academy (2006) for his pioneering Tangible Bits research
2001	MIT Tenure for his Tangible Bits research and Impact on the Academic Community (ACM SIGCHI)

Research experience

2011- present	MIT Media Lab , Jerome B. Wiesner Professor of Media Arts and Sciences
2008 - present	MIT Media Lab , Associate Director

2001- present **MIT Media Lab**, Professor of Media Arts and Sciences
 1995 - 2001 **MIT Media Lab**, Associate Professor of Media Arts and Sciences
 1992 - 1995 **NTT Human Interface Labs** (Japan), Senior Research Engineer
 1993 - 1994 **University of Toronto** (Toronto, Canada), Computer Systems Research Institute, Visiting Assistant Professor
 1986 - 1987 **GMD**: German National Research Center for Information Technology, (Bonn, Germany), Visiting Researcher
 1980 - 1992 **NTT Yokosuka Electric Communication Laboratories** (Japan), Research Engineer

Teaching experience

1995 - present **MIT Media Lab**, Cambridge MA
Professor, Media Arts and Sciences

- Taught HCI courses, including MAS.834 Tangible Interfaces course, and ~500 graduate students from MIT and Harvard took my MAS.834 course.

 1992 – 1993 **University of Toronto**, Toronto, Canada
Visiting Assistant Professor, Computer Systems Research Institute

- Co-taught HCI and CSCW courses with Prof. Ronald Baecker, Prof. Marilyn, and Prof. Bill Buxton

Publications

Ordered list based on citation ranking (Google Scholar)

1997 The most cited SIGCHI paper [Tangible bits: towards seamless interfaces between people, bits and atoms](#), Hiroshi Ishii, Brygg Ullmer, [CHI '97: Proceedings of the ACM SIGCHI Conference on Human factors in computing systems](#), March 1997, Pages 234–241, <https://doi.org/10.1145/258549.258715>

2000 [Emerging frameworks for tangible user interfaces](#), Brygg Ullmer, Hiroshi Ishii, [IBM Systems Journal](#) (Volume: 39, Issue: 3.4, 2000)

2008 [Tangible bits: beyond pixels](#), Hiroshi Ishii, [TEI '08: Proceedings of the 2nd international conference on Tangible and embedded interaction](#), February 2008, Pages xv – xxv, <https://doi.org/10.1145/1347390.1347392>

2012 [Radical atoms: beyond tangible bits, toward transformable materials](#), Hiroshi Ishii, David Lakatos, Leonardo Bonanni, and Jean-Baptiste Labrune, [Interactions, Volume 19, Issue 1](#), Pages 38 – 51, January 2012 <https://doi.org/10.1145/2065327.2065337>

1992 [ClearBoard: a seamless medium for shared drawing and conversation with eye contact](#) Hiroshi Ishii, Minoru Kobayashi, [CHI '92: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems](#), June 1992, pp 525- 532, <https://doi.org/10.1145/142750.142977>

1998 [Ambient displays: Turning architectural space into an interface between people and digital information](#), Craig Wisneski, Hiroshi Ishii, Andrew Dahley, Matt Gorbet, Scott Brave, Brygg Ullmer & Paul Yarin, [Cooperative Buildings: Integrating Information, Organization, and Architecture](#)(CoBuild 1998)

2004 [Iterative design of seamless collaboration media](#), H Ishii, M Kobayashi, K Arita, [Communications of the ACM, Volume 37, Issue 8](#), Pages 83 – 97, August 1994, <https://doi.org/10.1145/179606.179687>

