

Tohru Yagi

OFFICE ADDRESS

Department of Mechanical Engineering
Tokyo Institute of Technology
2-12-1-I3-20 O-okayama Meguro-ku, Tokyo 152-8552, JAPAN
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EDUCATION

Nagoya University, Nagoya, Japan Doctor of Engineering in Electro-Mechanical Engineering Supervisor: Professor Yoshiki Uchikawa Dissertation: A computational study on fixation mechanism and its application towards machine vision	March 1996
Nagoya University, Nagoya, Japan Master of Engineering in Mechanical Engineering	March 1993
University of Michigan, Ann Arbor, MI, USA Bioengineering Program, Rackham Graduate School	1991-1992
Nagoya University, Nagoya, Japan Bachelor of Engineering in Mechanical Engineering	March 1990
Pacific University, Forest Grove, OR, USA University of Washington, Seattle, WA, USA ELS Program	1986 fall-1987 1986 summer

PROFESSIONAL EXPERIENCE

Tokyo Institute of Technology (Tokyo Tech), Tokyo, Japan Professor, Department of Mechanical Engineering • Researching neural engineering, human interfaces and medical devices • Supervising graduate and undergraduate students • Teaching engineering courses to undergraduate and graduate students	2022-present
Massachusetts Institute of Technology (MIT), Cambridge, MA, USA Fulbright Visiting Scholar, Department of Mechanical Engineering • Researching engineering design education • Instructing students in 2.007 Design and Manufacturing I • Mentoring students in 2.75 Precision Machine Design	2012-2013
Tokyo Institute of Technology (Tokyo Tech), Tokyo, Japan Associate Professor, Department of Mechanical and Environmental Informatics • Researching neural engineering, human interfaces and medical devices • Supervising graduate and undergraduate students • Teaching engineering courses to undergraduate and graduate students	2005-2022
The Institute of Physical and Chemical Research (RIKEN), Nagoya, Japan Visiting Research Scientist,	2005-2015

- The Institute of Physical and Chemical Research (RIKEN), Nagoya, Japan 2004-2005
 Research Scientist, Bio-Mimetic Control Research Center
- Researching neural interface, a bio-signal human interface and fixation mechanism
 - Commercialized "EOG Switch" with SeaStar Corporation in Tokyo
- NIDEK Co., Ltd. (Ophthalmic device manufacturer), Gamagori, Japan 2001-2004
 Director, Artificial Vision Institute
- Established Artificial Vision Institute
 - Directed a national project "Artificial Vision System" as PI
 - Completed the first prototype of an artificial vision system in 2004 spring
- Nagoya University, Nagoya, Japan 1998-2001
 Assistant Professor, Dept. of Computational Science and Engineering
- Researched a bio-hybrid retinal implant and a bio-signal human interface as PI
 - Supervised graduate and undergraduate students
 - Taught Information Engineering Laboratory Course
- The Institute of Physical and Chemical Research (RIKEN), Saitama, Japan 1996-1998
 Postdoctoral Researcher, Bio-Mimetic Control Research Center
- Researched a hybrid retinal implant and a bio-signal human interface as PI

HONORS AND AWARDS

- The Best Paper Award, BMEiCON 2021 (Mr. Kirihara) 2021
- Outstanding Student Presentation Award, IEEJ 2021 (Mr. Kanno) 2021
- 9th JSEE AWARD, Japanese Society for Engineering Education 2021
- 25th Engineering Education Award, Japanese Society for Engineering Education 2021
- The 36th TELECOM System Technology Award (Mr. Peng) 2020
- Best Presentation Award, JMBE Young Investigator Workshop 2020 (Mr. Yamamoto) 2020
- Best Presentation Award, 5th Int. Conf. on Knowledge Eng. & App. (Ms. Upadhyaya) 2020
- Tokyo Tech-Astellas Rx+ INnovation Award (Tech ARINA) 2019
- Best Presentation Award, JMBE Young Investigator Workshop 2019 (Mr. Wada) 2019
- Outstanding Student Presentation Award, IEEJ 2019 (Mr. Peng) 2019
- Best Poster Award, IEEJ annual conference 2019 (Mr. Rix) 2019
- Best Poster Award, IEEJ annual conference 2019 (Mr. Miyata) 2019
- Excellent Presentation Award, 11th Multidiscip. Int. Student Workshop (Mr. Redlinger) 2019
- Tokyo Tech Excellent Education Award 2019
- The Best Paper Award, BMEiCON 2018 (Mr. Miyata) 2018
- The Best Student Presentation Award, Life Engineering Conf. 2018 (Ms. Watanabe) 2018
- The Best Paper Award, BMEiCON 2014 (Mr. Wilaiprasitporn) 2014
- The Best Paper Award, BMEiCON 2013 (Mr. Hattori) 2013
- 2012 Fulbright Visiting Scholar 2012
- The Best Paper Award, BMEiCON 2011 (Mr. Sakai) 2011
- 2010 Encouragement Award of IEEJ Trans. on Ele. Info.& Sys. (Mr. Ueda) 2011
- 2010 Best Teacher Award in Tokyo Institute of Technology 2011
- The Best Paper Award, BMEiCON 2010 (Mr. Knecht) 2010
- Guest Editor Award, Institute of Electrical Engineers of Japan 2009
- Conference organizing award, Institute of Electrical Engineers of Japan 2009
- Conference organizing award, Institute of Electrical Engineers of Japan 2008
- The Most Interesting Reading Award, Japan Society for Design Engineering 2008

TERUMO Science Promotion Foundation Award	2007
Certificate of Appreciation from Dr. Noyori, President of RIKEN	2006
SICE System Integration Division Encouragement Award	2005
Certificate of Appreciation from Dr. Noyori, President of RIKEN	2005
SICE System Integration Division, Best Session Presentation Award	2004
Japanese Electrical Engineering Societies in Tokai area, Presentation Award	2004
The 14th TELECOM System Technology Award	1998
Japan Society for the Promotion of Science Ph.D. Research Fellowship	1994
Nagoya University - University of Michigan Academic Exchange Program	1991
The Japan Scholarship Foundation (IKUEIKAI) Scholarship	1985

PUBLICATIONS, INVITED TALKS AND INTERVIEWS WITH NEWS MEDIA

(A complete list can be found at <http://www.bme.mech.e.titech.ac.jp/>)

Journal papers - 56

Peer-reviewed international conference proceedings - 81

Review papers - 39

Book chapters - 12

Patents - 19 (14 Japan, 1 US, 4 International (PCT))

Invited talks at symposia - 66 (13 International, 53 Japan)

Invited lectures at schools - 30 (9 US, 3 Canada, 18 Japan)

Press releases - 52 (7 TV, 42 Japanese newspapers and magazines, 3 Foreign newspapers)

PROFESSIONAL AFFILIATIONS

IEEE Engineering in Medicine and Biology Society (IEEE-EMBS)

Japanese Society for Medical and Biological Engineering (JSMBE)

The Institute of Electrical Engineers of Japan (IEEJ)

The Society of Instrument and Control Engineers (SICE)

Japanese Society for Engineering Education (JSEE)