

Y. Raymond Fu

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COE Distinguished Professor, Northeastern University, Boston

Associate Department Chair for Research, Department of Electrical and Computer Engineering

University of Illinois at Urbana–Champaign	Electrical and Computer Engineering (ECE)	Ph.D.	2008
University of Illinois at Urbana–Champaign	Statistics	M.S.	2007
Xi'an Jiaotong University, China	Pattern Recognition & Intelligent Systems	M.Eng.	2004
Xi'an Jiaotong University, China	Information Engineering (with honors)	B.Eng.	2001

Research Interests: Computational Intelligence, Machine Learning, Neural Computing, and Visual Intelligence.

Appointments

2025-now	Associate Department Chair for Research, Department of ECE,	Northeastern University, Boston
2019-now	COE Distinguished Professor, ECE and Computer Science	Northeastern University, Boston
2019-now	Professor, ECE and Khoury College of Computer Science,	Northeastern University, Boston
2020-now	Founder and President,	Ainnovation Labs, Inc., Boston
2023-2024	Co-Founder and Chief Scientific Officer,	Bithuman, Inc., Boston
2017-2020	Senior Vice President of Technology Innovation, Shiseido Americas (Stock 4911: Tokyo),	Boston
2015-2019	Associate Professor, ECE and Computer and Information Science	Northeastern University, Boston
2012-2015	Assistant Professor, ECE and Computer and Information Science	Northeastern University, Boston
2014-2018	Adjunct Professor, Electronic and Information Engineering	Xi'an Jiaotong University, China
2010-2012	Assistant Professor, Computer Science and Engineering	SUNY at Buffalo, NY
2009-2010	Lecturer, Computer Science	Tufts University, Medford, MA
2008-2010	Scientist, Computer Vision and Pattern Recognition	BBN Technologies, Cambridge, MA
2007-2008	Beckman Graduate Fellow and ECE RA	University of Illinois at Urbana–Champaign

Publications

In total, **500+ peer-reviewed technical publications**: 150+ journal papers; 300+ conference papers; 30+ book & chapters; 50+ patents. **Over 56,800 Citations (Google)**, with impact factors **h-index 105** and **i10-index 389**. Selected 5 publications for “*bio-inspired age estimation*” are as follows:

- [1] Y Zhang, Y Tian, Y Kong, B Zhong, and **Y. Fu**, “Residual dense network for image super-resolution,” *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018. (**Citation 5898**)
- [2] Y Zhang, K Li, K Li, L Wang, B Zhong and **Y. Fu**, “Image super-resolution using very deep residual channel attention networks”, *ECCV*, 2018. (**Citation 6899**)
- [3] Y. Wu, Y. Chen, L. Wang, Y. Ye, Z. Liu, Y. Guo, and **Y. Fu**, “Large Scale Incremental Learning,” *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019. (**Citation 1980**);
- [4] **Y. Fu**, G. Guo, and T.S. Huang, Age Synthesis and Estimation via Faces: A Survey, *IEEE Transactions on Pattern Analysis and Machine Intelligence (T-PAMI)*, vol. 32 no. 11, pp. 1955-1976, 2010. (**Citation 1000**)
- [5] Y. Kong, **Y. Fu**, Human action recognition and prediction: A survey, *International Journal of Computer Vision (IJCV)*, vol. 130, no. 5, pp. 1366-1401, 2022. (**Citation 1002**)

Awards and Honors (100+)

- ✧ **AAAI Fellow**, Association for the Advancement of Artificial Intelligence (AAAI), 2025;
- ✧ **IEEE Computer Science Society Edward J. McCluskey Technical Achievement Award**, 2024;
- ✧ **AIMBE Fellow**, American Institute for Medical and Biological Engineering, 2024;
- ✧ **EASA Member**, Member of European Academy of Sciences and Arts, 2023;
- ✧ **NAI Fellow**, National Academy of Inventors, 2023;
- ✧ **Member of Academia Europaea (MAE)**, 2022
- ✧ **AAAS Fellow**, American Association for the Advancement of Science (AAAS) 2022
- ✧ **IEEE Fellow**, Institute of Electrical and Electronics Engineers (IEEE) 2018
- ✧ **OSA Fellow**, The Optical Society, 2019
- ✧ **SPIE Fellow**, International Society for Optics and Photonics, 2018
- ✧ **IAPR Fellow**, International Association for Pattern Recognition, 2016
- ✧ **ACM Distinguished Member**, Association for Computing Machinery(ACM), 2018

- ✧ **INNS Young Investigator Award**, International Neural Networks Society, 2014
- ✧ **Member of ACM Future of Computing Academy**, 2017
- ✧ **Member of Global Young Academy (GYA)**, 2016
- ✧ **IEEE CIS Outstanding Early Career Award**, 2016
- ✧ **Amazon AWS Machine Learning Research Award**, 2020
- ✧ **JPMorgan Chase AI Research Faculty Research Awards**, 2020
- ✧ **Grainger Foundation Frontiers of Engineering Award**, 2016
- ✧ **National Academy of Engineering US Frontiers of Engineering**, 2015
- ✧ Nominee of **Presidential Early Career Award for Scientists and Engineers (PECASE)**, 2015
- ✧ **ONR Young Investigator Award**, Office of Naval Research, 2014
- ✧ **ARO Young Investigator Award**, Army Research Office, 2014
- ✧ **Søren Buus Outstanding Research Award**, Northeastern University, 2016
- ✧ **First Place Award**, 2016 ACM Multimedia - MSR Challenge of Recognizing One Million Celebrities in the Real World Grand Challenge.
- ✧ **First Place Ranking**, 2017 ACM Multimedia - MSR Challenge of Recognizing One Million Celebrities in the Real World Grand Challenge.
- ✧ **First Place Winner**, CLEAR'07 Workshop, 3D Head Pose Estimation Evaluation, 2007
- ✧ **IEEE Transactions on Affective Computing Best Paper Award**, 2017
- ✧ **SPIE Lockheed Martin Best Paper Award**, 2016
- ✧ **Outstanding Translational Research Award**, Northeastern University, College of Engineering, 2018
- ✧ **College of Engineering Faculty Fellows**, Northeastern University, 2017
- ✧ **Adobe Faculty Research Award**, 2015
- ✧ **Best Paper Award**, SIAM International Conference on Data Mining (SDM), 2014
- ✧ **Best Paper Award Candidate**, IEEE Int'l Conf. on Multimedia & Expo(ICME), 2014(4 out of 716 submissions)
- ✧ **Best Student Paper Honorable Mention Award**, IEEE Int'l Conf. on Automatic Face and Gesture Recog., 2013
- ✧ **TCSVT Best Associate Editor Award**, IEEE Transactions on Circuits & Systems for Video Technology, 2012
- ✧ **LSVA Best Paper Award**, IEEE ICDM Workshop on Large Scale Visual Analytics (LSVA), 2011
- ✧ **IC Postdoctoral Research Fellowship Award**, National Geospatial-Intelligence Agency, 2011
- ✧ **Best Reviewer Award**, IEEE International Conference on Multimedia and Expo (ICME), 2011
- ✧ **Google Faculty Research Award**, 2010
- ✧ **ITESOFT Best Paper Award**, IAPR Int'l Conf. on the Frontiers of Handwriting Recognition (ICFHR), 2010
- ✧ **M. E. Van Valkenburg Graduate Research Award**, 2008
- ✧ **DoCoMo USA Labs Innovative Paper Award**, IEEE Int'l Conference on Image Processing (ICIP), 2007
- ✧ **Beckman Graduate Fellowship**, Arnold and Mabel Beckman Foundation, 2007~2008
- ✧ **Chinese Government Award for Outstanding Self-financed Students Abroad**, Chinese Government, 2007-2008
- ✧ **First Place Winner**, CLEAR'07 Workshop, 3D Head Pose Estimation Evaluation, 2007
- ✧ **HP Silver Medal and Scholarship**, Hewlett-Packard Company, USA, 2003
- ✧ **Rockwell Automation Master of Science Scholarship**, Rockwell Automation, USA, 2002
- ✧ **Keynote Speaker (invited)**, Korea University, Dept. of Brain and Cognitive Engineering, Workshop on Human Activity Prediction for Video Surveillance Applications, 2015
- ✧ **Keynote Speaker**, Joint Conf. on Harmonious Human Machine Environment (HHME), 2011
- ✧ **Entrepreneurship Honors and Awards**
 - **Founder of Giaran. Shiseido Americas (Stock 4911:Tokyo) Acquires Giaran, Inc.** 2017
 - **MassChallenge Boston Final List**, 2017
 - **Procter & Gamble Scholarship**, 2017
 - **MIT Chief Platinum Winners**, 2016
 - **Microsoft Innovative Award**, 2015
 - **Mass Challenge**, 2015
 - **MIT Innovation Initiative**, 2015
 - **\$100K MIT Entrepreneurship Competition**, 2015
 - **MIT Enterprise Forum**, 2015
 - **First Prize of NECINA NEW Accelerator**, 2015
 - **Lemelson-Illinois Student Prize**, Finalist of UIUC, 2008
 - **GE Edison Cup**, General Electric Fund, Technology Innovation Competition, 2002