

1. **Name:** Jian-yu Lu
2. **Education – degrees, discipline, institution, year:**
Ph.D. in Biomedical Engineering, Southeast University, China, February 1985 – June 1988
M.S. in Acoustics/Physics, Tongji University, China, February 1982 – February 1985
B.S. in Electrical Engineering/Physics, China, February 1978 – February 1982.
3. **Academic Experience - 29 years**
Professor, Dept of Bioengineering, 1997-Present.
Adjunct Professor, Dept of Medicine, 1998-Present.
Graduate Program Director, Bioengineering, 2009-2002.
Associate Professor, Department of Physiology and Biophysics, Mayo Clinic/Mayo Medical School, USA, 1997.
Assistant Professor, Department of Physiology and Biophysics, Mayo Clinic/Mayo Medical School, USA, 1991-1997
Associate Consultant, Department of Physiology and Biophysics, Mayo Clinic/Mayo Medical School, USA, 1991-1997
Research Associate, Department of Physiology and Biophysics, Mayo Clinic/Mayo Medical School, USA, 1990-1991
Postdoc, Department of Physiology and Biophysics, Mayo Clinic/Mayo Medical School, USA, 1988-1990
4. **Current membership in professional organizations:**
Fellow, Institute of Electrical and Electronics Engineers (IEEE)
Fellow, American Institute of Ultrasound in Medicine (AIUM)
Fellow, American Institute of Medical and Biomedical Engineering (AIMBE)
Member, Acoustical Society of America (ASA)
Member, Sigma Xi
5. **Honors and Awards:**
Outstanding Services Award, IEEE UFFC Society, 2016
Outstanding Papers Award for two papers in IEEE Transactions on UFFC, 1992
Edward C. Kendall Award, Mayo Clinic, 1992
National Institute of Health (NIH) FIRST Award, 1991
Whitaker Foundation Award, 1991
First Prize Award, 2nd Youth Biomedical Engineering Conference, Nanjing, China, 1987
Second Prize Award of Youth Excellent Paper, 1986 Joint Biomedical Engineering Conference, Wuhan, China
6. **Service Activities (most important within and outside of the institution)**
National and International:
2016-Present: Chair, Nominations, IEEE UFFC Society
2009-Present: Chair, Bylaws and Constitution, IEEE UFFC Society
2016-Present: Member, Editorial Board, IEEE Access Journal
2016-Present: Junior Past President, IEEE UFFC Society
2016-Present: Member at Large, IEEE Toledo Section
2014-2015: President, IEEE UFFC Society
2014-2015: Member, IEEE Technical Activities Board (TAB), IEEE
2012-2013: President-Elect, IEEE UFFC Society
2009-2011: Elected AdCom Member, IEEE UFFC Society
2008: General Chair, 2008 IEEE International Ultrasonics Symposium, Beijing, China
2002-2007: Editor-in-Chief, IEEE Transactions on UFFC
2001: Technical Program Committee Chairs, 2001 IEEE International Ultrasonics Symposium, Atlanta, GA, USA
2000-Present: Member, Ultrasonics Standing Committee, IEEE UFFC Society
2000 and almost every year later: Session Chairs, IEEE International Ultrasonics Symposia
1996 and several later years: Exhibit Chair, IEEE International Ultrasonics Symposia

University, College, and Department:

2000-2001: Chair, Department Personal Committee (DPC), University of Toledo
2001-Present: Member, Department Personal Committee (DPC), University of Toledo
1997-2013: Member, University Patent Committee (UPC), University of Toledo
1998-2013: Member, Research Center and Institute Review Team, University of Toledo
2000-2003: Member, Engineering Committee on Academic Personnel (ENCAP), University of Toledo.
2000 and other years: Chair, Graduate Curriculum Committee of College of Engineering.
2000 and other years: Member, Graduate Committee of College of Engineering.
2000 and other years: Member, Search Committee of Chair of EECS Department.
2000 and other years: Member, Search Committee of the Associate Dean of the College of Engineering.

1999 and other years: Director, Center for Medical Imaging & Data Mining, the University of Toledo.

1999 and other years: Other services in Department of Bioengineering, website development, Dissertation and thesis committees, undergraduate advisors, and misc services.

7. Most important Publications/Presentations:

Refereed Journal Articles/Patents/Conference Papers – last 5 years:

Jian-yu Lu, "Speckle Noise Reduction for High-Frame-Rate Imaging," in 2017 IEEE International Ultrasonics Symposium Proceedings (to be published).

Jian-yu Lu, "Recursive Fourier-Based High-Frame Rate Imaging," in 2014 IEEE International Ultrasonics Symposium Proceedings, pp. 121-124, 2014.

Jian-yu Lu, "Reducing clutter noise in fast ultrasound imaging with transverse high-pass filtering," in 2013 IEEE International Ultrasonics Symposium Proceedings (2013 Joint UFFC, EFTF, and PFM Symposium), pp. 1244-1247, 2013.

Jian-yu Lu, "Limited-Diffraction Beams for High-Frame-Rate Imaging," in the book, Non-Diffracting Waves, Editors: Hugo E. Hernandez-Figueroa, Erasmo Recami, and Michel Zamboni-Rached, Publisher: John Wiley & Sons, Inc., (Wiley-VCH), Chapter 5, pp.135-160, 2014. (Invited book chapter as a review with 88 references to the latest development of the high-frame-rate imaging).

Jian-yu Lu, "High frame rate imaging system," United States Patent, no. 8496585, Issued: July 30, 2013 (with 25 claims, patent term adjustment is 972 days from the filing date of July 24, 2008). The 25 claims contain various ideas to implement the high frame rate (HFR) imaging method.

Jian-yu Lu, "Effects of Masks on Reconstruction of High-Frame-Rate Images," in 2012 IEEE International Ultrasonics Symposium Proceedings, CFP12ULT, pp. 2137-2140, 2012.

Hong Chen and **Jian-yu Lu**, "A method for fast speckle tracking," in 2012 IEEE International Ultrasonics Symposium Proceedings, CFP12ULT, pp. 2579-2582, 2012.

Hong Chen and **Jian-yu Lu**, "Quantitative Assessment of Effects of Phase Aberration and Noise on High-frame-rate Imaging," Ultrasonics, vol. 53, no. 1, pp. 53-64, January 2013, DOI: 10.1016/j.ultras.2012.03.013.

Jian-yu Lu and Hong Chen, "High frame rate imaging with diverging beam transmission and Fourier reconstruction," in 2011 IEEE International Ultrasonics Symposium Proceedings, pp. 2221-2224, 2011.

Hong Chen and **Jian-yu Lu**, "Estimation of two-dimensional strain rate based on high frame rate ultrasound imaging method," Proceedings of Meetings on Acoustics (POMA), vol. 14, 020001, January 13, 2012.

Conference presentations and posters – last 4 years: (FIRST AUTHOR IS PRESENTER)

Jian-yu Lu, "Speckle Noise Reduction for High-Frame-Rate Imaging," [2017 IEEE International Ultrasonics Symposium Proceedings, Washington D.C., USA, September 6-9, 2017] (to be presented).

Jian-yu Lu, "Recursive Fourier-Based High-Frame Rate Imaging," [2014 IEEE International Ultrasonics Symposium Proceedings, Chicago, IL, USA, September 3-6, 2014].

Jian-yu Lu, "Reducing clutter noise in fast ultrasound imaging with transverse high-pass filtering," [2013 IEEE International Ultrasonics Symposium (2013 Joint UFFC, EFTF, and PFM Symposium), Prague Congress Centre, Prague, Czech Republic, July 21-25, 2013].

Jian-yu Lu, "Effects of Masks on Reconstruction of High-Frame-Rate Images," [2012 IEEE International Ultrasonics Symposium, International Congress Center, Dresden, Germany, October 7-10, 2012].

Hong Chen and **Jian-yu Lu**, "A method for fast speckle tracking," [2012 IEEE International Ultrasonics Symposium, International Congress Center, Dresden, Germany, October 7-10, 2012].

Jian-yu Lu, "Pulse-echo medical ultrasound imaging based on Fourier image reconstruction," [Next Generation Medical Imaging, Carnegie Mellon University (CMU), Pittsburg, Pennsylvania, USA, September 5-6, 2012] (Invited Talk - a video recording of the talk is on a CMU website).

8. Professional development activities in the last five years:

Attended and/or presented at many national and international conferences.