

Omer T. Inan, PhD

Associate Professor • Electrical & Computer Engineering • Georgia Institute of Technology
Last Updated 12/3/2020

Education

Sep 2009 Ph.D., Electrical Engineering, Stanford University, Stanford, CA
Apr 2005 M.S., Electrical Engineering, Stanford University, Stanford, CA
Apr 2004 B.S., Electrical Engineering, Stanford University, Stanford, CA

Positions

2018-present Associate Professor, Electrical and Computer Engineering, Georgia Tech
2018-present Adjunct Associate Professor, Biomedical Engineering, Georgia Tech
2013-present Program Faculty, Bioengineering Graduate Program, Georgia Tech
2013-2018 Assistant Professor, Electrical and Computer Engineering, Georgia Tech
2015-2018 Adjunct Assistant Professor, Biomedical Engineering, Georgia Tech
2009-2013 Visiting Scholar, Electrical Engineering, Stanford University
2009-2013 Chief Engineer, Countryman Associates Inc.
2009-2012 Collaborator, NASA Ames Research Center
2006-2007 Intern/Co-Op, ALZA Corporation (A Johnson & Johnson Co.)

Selected Honors & Awards

2019 Invited Participant, National Academy of Engineering China-America Frontiers of Engineering Symposium (NAE CA-FOE)
2019 Runner-Up, Best Poster Award, *IEEE Biomedical & Health Informatics Conf.*
2019 Richard M. Bass / Eta Kappa Nu Outstanding Teacher Award, Georgia Tech
2018 IEEE Sensors Council Early Career Award
2018 Office of Naval Research Young Investigator Award (ONR YIP)
2018 National Science Foundation CAREER Award
2018 Roger P. Webb ECE Outstanding Junior Faculty Member Award, Georgia Tech
2018 Runner-Up, Best Paper Award, *IEEE Body Sensor Networks Conference*
2017 Sigma Xi Young Faculty Award, Georgia Tech
2016 Lockheed Dean's Excellence in Teaching Award, Georgia Tech
2015, 2016 Nominated, National Academy of Engineering, Frontiers of Engineering
2015 Senior Member, IEEE
2008-2009 Gerald J. Lieberman Fellowship, Stanford University

Selected Examples of Research Impact

Patents (of 7 issued, 15 pending) licensed by start-ups and large companies for commercialization.

Start-up co-founded with graduated PhD student to commercialize research (Cardiosense, Inc.).

Invitation by NIH leadership to demonstrate technologies to US Congressional Staffers.

Invitation to lead a cross-agency (NSF, NIH, FDA) workshop on the future of clinical trials.

Publications cited a total of 4,182 times, with an h-index of 28 (Google Scholar).

Editorial board member for three international journals, and technical editor, program committee member, or technical committee member for multiple international conferences.

Invited speaker for dozens of conferences, seminar series, and government / industry events.

Five Best Research Products (of 108 total journal and 119 conference papers)

1. O. T. Inan, A. Q. Javaid, S. Dowling, M. Etemadi, A. Dorier, J. A. Heller, A. O. Bicen, S. Roy, T. De Marco, and L. Klein, “Novel Wearable Seismocardiography and Machine Learning Algorithms Can Assess Clinical Status of Heart Failure Patients,” *Circulation: Heart Failure*, v. 11, no. 1, pp. 1-10, 2018. **(Journal IF: 6.3. This work was featured on the cover of the journal, and as an “Editor’s Pick” for the January 2018 issue.)**
2. †J. Zia, †J. Kimball, C. Rolfes, J.-O. Hahn, and O. T. Inan, “Enabling the Assessment of Trauma-Induced Hemorrhage via Smart Wearable Systems,” *Science Advances*, v. 6, no. 30, p. 1-11, 2020. **(Journal IF: 12.8.)**
3. N. Z. Gurel, M. Huang, M. T. Wittbrodt, H. Jung, S. L Ladd, M. M. H. Shandhi, Y.-A. Ko, L. Shallenberger, J. A. Nye, B. Pearce, V. Vaccarino, A. J. Shah, J. D. Bremner, and O. T. Inan, “Quantifying Acute Physiological Biomarkers of Transcutaneous Cervical Vagal Nerve Stimulation in the Context of Psychological Stress,” *Brain Stimulation*, In Press. **(Journal IF: 6.9. Acceptance Rate: < 10%.)**
4. C. N. Teague, S. Hersek, H. Toreyin, M. L. Millard-Stafford, M. L. Jones, G. F. Kogler, M. N. Sawka, and O. T. Inan, “Novel Methods for Sensing Acoustical Emissions from the Knee for Wearable Joint Health Assessment,” *IEEE Transactions on Biomedical Engineering*, v. 63, no. 8, pp. 1581-1590, 2016. **(This article was featured by IEEE TBME on the website homepage and in the newsletter, was one of the top 10 most downloaded papers in TBME for 2016, and was featured in the IEEE EMB Society newsletter.)**
5. O. T. Inan, P.-F. Migeotte, K.-S. Park, M. Etemadi, K. Tavakolian, J. M. Zanetti, I. Funtova, J. Tank, G. K. Prisk, and M. Di Rienzo, “Ballistocardiography and seismocardiography: A review of recent advances,” *IEEE Journal of Biomedical and Health Informatics*, v. 19, no. 4, pp. 1414-1427, 2015. **(This paper has received 383 citations.)**

Industry / Start-Up Experience

2020-present Co-Founder and Scientific Advisor to Cardiosense, Inc.

2013-present Scientific Advisor, Physiowave, Inc.

2013-present Consultant to more than a dozen companies / start-ups

2009-2013 Chief Engineer (CTO), Countryman Associates, Inc., Menlo Park, CA

Selected Grants & Contracts (of 35 total as PI, \$32.1MM total funding)

CAREER: Wearable Joint Sounds Sensing for Children with Juvenile Idiopathic Arthritis, NSF (CBET) Grant 1749677.

Noninvasive Biosensors to Detect Cardiovascular Changes in Heart Failure Patients (PI), NIH (NHLBI), Grant R01HL130619.

SCH: INT: Wearable Assistive Technologies for Knee Joint Health Assessment and Rehabilitation (PI), NSF / NIH (NIBIB), Grant R01EB023808.

Closed-Loop Vagal Nerve Stimulation for Post-Traumatic Stress Disorder Patients (Co-PI), DARPA BTO, Cooperative Agreement N66001-16-2-4054.

Student Guidance

Currently advising or co-advising 2 postdoctoral fellows, 24 PhD students, and 3 MS students at Georgia Tech. Graduated 14 PhD students and 7 MS students. Four students have since started in faculty positions at leading universities (Cornell, Texas A&M, NCSU, Koc University).