

**Rajesh Rajamani**  
University of Minnesota

**AWARDS & HONORS:**

- ◆ **AASHTO's Region 3 High Value Research Award**, from the American Association of State Highway and Transportation Officials, June 2024. The award recognizes the nation's top high-value research projects as chosen by state DOT research directors in each of the four AASHTO regions.
- ◆ **Highly Ranked Scholar – Lifetime**: Based on ranking in the top 0.05% of all scholars in four citation and publication categories by ScholarGPS (May 2024).
- ◆ **Distinguished Alumnus Award**, Indian Institute of Technology, Madras, Highest honor awarded to its alumni by IIT Madras for their outstanding accomplishments, January 2023.
- ◆ **Charles Stark Draper Award for Innovative Practice**, from the ASME Dynamic Systems and Control Division, October 2022.
- ◆ **IEEE Fellow**, Elected Fellow of the Institute of Electrical and Electronic Engineers (IEEE), November 2021. Less than 0.1% of members are recognized with this title by the IEEE Board of Directors each year.
- ◆ **Plenary Speaker**, 2021 Modeling, Estimation and Control Conference (MECC), Austin, Texas, Oct 24-27, 2021.
- ◆ **Keynote Speaker**, IEEE-ASME International Conference on Advanced Intelligent Mechatronics, Boston, Massachusetts, USA, July 6-10, 2020.
- ◆ **Distinguished Lecture**, 32nd Chinese Control and Decision Conference, Hefei, China, May 23-25, 2020.
- ◆ **Plenary Speaker**, IEEE-ICSC 9<sup>th</sup> International Conference on Systems and Control, Caen, France, October 14-16, 2020.
- ◆ **Benjamin Y.H. Liu – TSI Applied Technology Endowed Chair**, 2019. This endowed chair Professorship is awarded to an outstanding faculty member at the University of Minnesota whose research has significant record of, or potential for, successful market commercialization.
- ◆ **IEEE/ASME Transactions on Mechatronics Best Paper Award Finalist**, 2019. Only 6 out of 273 papers published in 2019 were selected for this honor.
- ◆ **Plenary Speaker**, 2018 Indian Control Conference, "Interesting Problems in Nonlinear Observer Design and Applications to the Autonomous World," annual conference co-sponsored by IEEE, January 4-6, 2018.
- ◆ **ASME A&TS Best Paper Award**, 2016. This award by the ASME automotive and transportation systems (A&TS) technical committee is given to the best automotive paper from the annual American Control Conference.
- ◆ **Best University Start Ups of 2016**, Innotronics, a start-up company co-founded by me was selected to be among the top 35 start-ups of 2016 by the National Council of Entrepreneurial Tech Transfer.
- ◆ **ASME Fellow**, Elected Fellow of the American Society of Mechanical Engineers (ASME), July 2012.
- ◆ **Editors' Choice, Applied Physics Letters**, July 2012. Paper on flexible solid-state supercapacitors selected for the APL 50<sup>th</sup> Anniversary Editor's Choice Collection. Only 50 papers out of more than 12,000 papers published between 2009-2012 were selected for this honor.

- ◆ **Keynote Speaker**, 2012 ASME IDETC International Conference on Advanced Vehicle Technologies, August 12-15, 2012.
- ◆ **ASME A&TS Best Paper Award**, 2011. This award by the ASME automotive and transportation system (A&TS) committee is given to the best automotive paper at the annual American Control Conference. This was the inaugural year of the award.
- ◆ **Keynote Speaker**, 2011 IEEE International Conference on Mechatronics, Istanbul, Turkey, April 13-15, 2011, "Novel Sensors, New Estimation Algorithms and Active Controls: Technologies for Improving Highway Vehicle Safety and Mobility."
- ◆ **Plenary Speaker**, 29<sup>th</sup> IASTED International Conference on Modeling, Identification and Control, Innsbruck, Austria, February 2010, "Novel Sensors, New Estimation Algorithms and Advanced Controls: Solutions for Improving Highway Vehicle Safety and Mobility."
- ◆ **O. Hugo Schuck Award** from the American Automatic Control Council, 2007. This award is given to the best application paper selected out of more than 1000 papers presented at the annual American Control Conference. It is considered to be one of the most distinguished honors in the international control systems community.
- ◆ **Ralph R. Teetor Award** from the Society of Automotive Engineers for contributions to automotive research and education, 2007.
- ◆ **CTS Research Partnership Award** for partnership with the Minnesota Department of Transportation to achieve results of significant impact on transportation in Minnesota.
- ◆ **Cover page**
  - *IEEE Control Systems Magazine*, article titled "Observers with Dual Spatially Separated Sensors for Enhanced Estimation – Industrial, Automotive and Biomedical Applications," June 2017.
  - *IEEE Control Systems Magazine*, article titled "Tire Road Friction Coefficient Estimation – Real-Time Estimation Methods for Active Automotive Safety Applications," August 2010.
- ◆ **Best Paper of the Year Award** from the journal *IEEE Transactions on Control Systems Technology*, 2001.
- ◆ **NSF CAREER Award** A prestigious award from the National Science Foundation for junior faculty who have the potential to launch a distinguished academic career in research and teaching. Based on a nationwide competition conducted by the National Science Foundation, June 2000.
- ◆ **Distinguished Service Award** from the Regents of the University of California, Berkeley, for my role in the success of the NAHSC Automated Highway Systems Demonstration (NAHSC : National Automated Highway Systems Consortium)
- ◆ **Outstanding Achievement of the Year Award** at United Technologies Research Center (UTRC) for 1995. Awarded for exceptional technical accomplishments in the demonstration of Active Magnetic Guidance for elevators. This is the highest engineering honor awarded in the company.
- ◆ **Great Job Award** at United Technologies Research Center, for "a major technical achievement" in designing and successfully demonstrating a contactless active magnetic suspension system for elevators, March 1995.
- ◆ **The Regents Fellowship** for graduate study at UC Berkeley, Aug 1989.
- ◆ **The Sivasailam Merit Prize** for the best undergraduate project at Indian Institute of Technology, Madras, June 1989.

## **PROFESSIONAL SERVICE/ LEADERSHIP:**

- ◆ Senior Editor, IEEE Transactions on Intelligent Transportation Systems, Jan 2021 - present.
- ◆ General Chair, 2027 American Control Conference.
- ◆ Treasurer, ASME Dynamic Systems and Control Division, May 2020 – May 2023.
- ◆ Program Chair, 2017 American Control Conference.
- ◆ Board Member, IEEE Control Systems Society, Board of Governors, 2016-2017.
- ◆ Finance Chair, 2012 IEEE Conference on Decision and Control, December 2010-2012.
- ◆ Finance Chair, 2011 IEEE Conference on Decision and Control, December 2009-2011.
- ◆ Finance Chair, 2008 American Control Conference, June 2006 – June 2008.
- ◆ Finance Chair, 2012 ASME Dynamic Systems and Control Conference.
- ◆ Associate Editor, IEEE Control Systems Magazine, September 2011 – June 2018.
- ◆ Associate Editor, IEEE Transactions on Control Systems Technology, December 2003 – August 2011.
- ◆ Associate Editor, IEEE/ ASME Transactions on Mechatronics, August 2003 – August 2005
- ◆ Chair, IEEE Technical Committee on Automotive Control, January 2007 – January 2009.
- ◆ Chair, ASME Technical Committee on Biosystems and Health Care, October 2013-October 2014.
- ◆ Chair – Working Group on Vehicle Chassis Control, IEEE Technical Committee on Automotive Control, June 2005 – December 2006.
- ◆ Vice Chair – ASME Vehicle Design Committee, American Society of Mechanical Engineers, May 2006 – December 2007.
- ◆ General Chair, 2008 Joint IEEE-ASME-SAE Workshop on Open Problems in Automotive Control.
- ◆ Outstanding Paper Award Committee, IEEE Transactions on Control Systems Technology, 2005
- ◆ Program Committee, American Control Conference, 2003.

### **Selected University Leadership Roles**

- ◆ Associate Director (Research), Minnesota Robotics Institute (MnRI)
  - Founding Associate Director of Research at MnRI, a university-wide initiative to grow robotics research, education and entrepreneurship in Minnesota.
  - Responsible for initiating a seed research grant program at MnRI, for organizing submission of multi-investigator large external proposals, and for publication of quarterly newsletters and annual reports. The seed research grant program has led to over \$8 million in large externally funded research grants over the last three years.
  - Under my leadership, the intelligent transportation systems research at MnRI has seen significant growth, including successful fund raising for the purchase of a \$400k autonomous vehicle, and establishment of over 8 new ITS-focused research projects.
- ◆ Chair, ME Department Head Search Committee, May 2018 – November 2018.
- ◆ Chair, College of Science and Engineering Promotion and Tenure Committee (College P&T Committee), University of Minnesota, September 2012 – August 2013.
- ◆ Chair, Control Systems Teaching Group, Department of Mechanical Engineering, University of Minnesota, September 2014 – present.
- ◆ Chair, Post Tenure Review Committee, Department of Mechanical Engineering, University of Minnesota, January 2015 – December 2017.
- ◆ Chair, Faculty Search Committee, Department of Mechanical Engineering, University of Minnesota, June 2013 – June 2014.
- ◆ Director of Graduate Studies, Control Science and Dynamical Systems (CsDy) Program, University of Minnesota, June 2006 – September 2009.

### **BOOKS**

*Rajesh Rajamani*, "Vehicle Dynamics and Control," Springer.

- Second edition, ISBN 978-1461414322, January 2012
- Receives 500+ citations by other researchers in refereed publications every year.

- Popular text book adopted for graduate level courses by the University of California at Berkeley and by several other universities across the world.