

Curriculum Vitae of Karl H. Johansson

Academic degrees

1992 MSc in Electrical Engineering and 1997 PhD in Automatic Control, Lund University
2002 Docent, Automatic Control, KTH Royal Institute of Technology

Selected current positions and assignments of importance

2021– Executive Committee, C3.ai Digital Transformation Institute
2020, 2022 Chair, ERC Consolidator Grant Panel on Systems and Comm Engineering
2020– Director, Digital Futures
2020–2024 International Scientific Advisory Board of Eindhoven University of Technology
2020–2021 Vice President, European Control Association (EUCA)
2020– International Federation of Automatic Control (IFAC) Council
2020– Member of the Advisory Board of Department of Automation, Tsinghua University
2019– Chair, IEEE Control Systems Society Fellow Nominations Committee
2019– Scientific Council for Natural and Engineering Sciences, Swedish Research Council (VR)
2018– Distinguished Professor of Overseas Academician, Zhejiang University
2018–2027 VR Distinguished Professor
2010–2027 Wallenberg Scholar, Knut and Alice Wallenberg Foundation (KAW)
2007– Chaired Professor, Networked Control, Electrical Engineering and Computer Science, KTH

Selected previous positions

2017–2020 Chair, IFAC Awards Committee
2016–2020 International Chair Adjunct Professor, NTNU, Norway
2013–2020 Director, Stockholm Strategic Research Area ICT The Next Generation
2016–2018 Elected member, IEEE Control Systems Society Board of Governors
2016–2018 Chair, IEEE Simon Ramo Medal Committee
2016–2017 Visiting Scholar, University of California, Berkeley
2016 & 2018 Member of the ERC Consolidator Grant panel on Systems and Comm Engineering
2015–2018 Member of the Board, Drive Sweden, VINNOVA SIP on Automated Transport Systems
2015–2016 Visiting Fellow, Institute of Advanced Study, Hong Kong UST
2014–2017 Visiting Professor, School of EEE, Nanyang Technological University, Singapore
2013–2015 Chair of the VR Evaluation Panel in Signals and Systems
2009–2016 Director, VR ACCESS Linnaeus Centre, KTH
2008–2011 Chair of IFAC Technical Committee on Networked Systems
2006–2007 Visiting Professor, California Institute of Technology, Pasadena
2006–2011 VR Senior Researcher
1999–2007 Assistant and Associate Professor, KTH
1998–2000 Visiting Research Fellow, University of California, Berkeley

Selected major distinctions and awards

2020 Supervisor for Best Student Paper Award, IFAC Workshop on CPHS
2017 Fellow of the Royal Swedish Academy of Engineering Sciences
2017– IEEE Control Systems Society Distinguished Lecturer
2017 VR Distinguished Professor Grant. First such grant to KTH
2015 IEEE Transactions on Automation Science and Engineering Best Application Paper Award
2014 Best Theory Paper Award of the World Congress on Intelligent Control and Automation
2013 Fellow of the IEEE
2009 Best Paper Award, IEEE International Conference on Mobile Ad-hoc and Sensor Systems
2009 KAW Wallenberg Scholar. Among first ten Wallenberg Scholars awarded in all sciences
2004 Future Research Leader, Swedish Foundation for Strategic Research
1998 & 1999 Young Researcher Award, LM Ericsson's Foundation for Electrotechnical Research
1996 IFAC Young Author Prize and Young Researcher Award, Scania AB
1993 Peccei Award, International Institute of System Analysis, Laxenburg, Austria

Publications and patents

230 refereed journal papers, 500 peer-reviewed conference papers, 28 book chapters, 2 edited books, 5 patents. Google Scholar h-index 88, citations 34 593

Research expertise

Networked and distributed control; Cyber-physical and cyber-secure control systems; Hybrid and embedded systems; Applications in transportation, energy, and automation networks

PhD supervision and postdocs

Supervisor or co-supervisor of 29 graduated PhD's. Currently supervising 11 PhD students.

Past supervision of 47 postdocs. Currently supervising 11 postdocs.

Selected recent plenary presentations at major international conferences and institutions

CAA Int. Conf. on Vehicular Control and Intelligence, 2021; IEEE Int. Conf. on Control and Fault-Tolerant Systems, 2021; 25th Int. Conf. on Methods and Models in Automation and Robotics, 2021; World Artificial Intelligence Conf., 2021; 23rd Brazilian Conf. on Automation, 2020; Max Planck Institute for Intelligent Systems, 2020; Int. Conf. on Industrial Artificial Intelligence, 2020; 14th APCA Int. Conf. on Automatic Control and Soft Computing 2020; 54th *Regelungstechnisches Kolloquium*, 2020; ETH Distinguished Seminar in Robotics, Systems and Control, 2019; IEEE Conf. on Control Technology and Applications, 2019; IEEE Int. Conf. on Control and Automation, 2019; IFAC Workshop on Control of Transportation Systems, 2019; Nicholson Distinguished Lecture, Sheffield U, 2018; IFAC Symposium on Robust Control Design, 2018; ACM MobiHoc, 2018; Pierce Laboratory Seminar Series, MIT, 2017; Chinese Control and Decision Conf., 2017; European Control Conf., 2016; DREAMS Seminar, UC Berkeley, 2016; Int. Conf. on Control, Automation and Systems, 2015; IEEE Multi-Conf. on Systems and Control, 2014; Chinese Control Conf., 2014; IFAC NECSYS, 2010

Selected editorial board memberships

2018– Editorial Committee for Annual Review of Control, Robotics, and Autonomous Systems

2018– Editorial Board of the ACM Transactions on the Internet of Things

2013–2020 Editorial Board of the European Journal of Control

2015–2019 Senior Editor of the IEEE Transactions on Control of Network Systems

2008–2010 Editorial Board of the IEEE Transactions on Automatic Control

2007–2012 Editorial Board of the IET Control Theory and Applications

2003–2006 Editorial Board of the IFAC journal Automatica

Selected organization of international conferences

2024 General Co-Chair, European Control Conference

2023 IPC Co-Chair, IEEE Conference on Decision and Control

2011, 2014, 2017, 2020 Technical Associate Editor or Associate Editor, IFAC World Congress

2019 IPC Chair, European Control Conference

2019 IPC Vice-Chair for Tutorial Sessions, IEEE Conference on Decision and Control

2015 Special Session Chair, IEEE Int Conference on Automation Science and Engineering

2013 IPC Co-Chair of the European Control Conference

2013 General Chair of the 5th ACM Workshop BuildSys

2010 General Chair of the ACM-IEEE Cyber-Physical Systems Week

2010 IPC Co-Chair 13th ACM Int Conference on Hybrid Systems: Computation and Control

2009 IPC Co-Chair for IFAC NECSYS

2008 IPC Co-Chair for IEEE Conference on Automation Science and Engineering

Selected ongoing projects

HiSS (Humanizing the Sustainable Smart City), Digital Futures, 2019-2024; Co-PI

CLAS, Swedish Foundation for Strategic Research (SSF), 2018-2023; Co-PI

ENSEMBLE (Enabling Safe Multi-Brand Platooning for Europe), Collaborative Projects, EU framework programme Horizon 2020, 2018-2021; Co-PI

Distinguished Professor Grant, VR, 2018-2027; PI

Societal-scale cyber-physical transport systems, SSF, 2016-2022; PI

WASP (Wallenberg AI, Autonomous Systems and Software Program), KAW, 2015-2029

Wallenberg Scholar, KAW, 2010-2027; PI

Stockholm, July 23, 2021