Curriculum Vitae of Karl H. Johansson

Academic degrees
1992 MSc in Electrical Engineering, Lund University
1997 PhD in Automatic Control, Lund University, Advisor: K. J. Åström
2002 Docent, Automatic Control, KTH Royal Institute of Technology

Current positions
2016–2017 Visiting Scholar, University of California, Berkeley; Hosts: S. S. Sastry & C. Tomlin
2016– International Chair Adjunct Professor, Norwegian University of Science and Technology
2014– Visiting Professor, School of EEE, Nanyang Technological University, Singapore
2013– Director, The Stockholm Strategic Research Area ICT The Next Generation
2007– Chaired Professor, Networked Control, KTH

Previous positions
2009–2016 Director, ACCESS Linnaeus Centre, KTH
2015–2016 Visiting Fellow, Institute of Advanced Study, Hong Kong UST
2006–2007 Visiting Professor, California Institute of Technology, Pasadena; Host: R. M. Murray
2006–2011 Senior Researcher, Swedish Research Council (VR)
1999–2007 Assistant and Associate Professor, KTH
1998–2000 Visiting Research Fellow, University of California, Berkeley; Host: S. S. Sastry

Major distinctions and awards
2017–2019 IEEE Distinguished Lecturer, IEEE Control Systems Society
2015 IEEE Transactions on Automation Science and Engineering Best Application Paper Award
2015 Guan Zhao-Zhi Award, Chinese Control Conference
2014 Best Theory Paper Award, World Congress on Intelligent Control and Automation
2013 Fellow of the IEEE
2009 Wallenberg Scholar, Knut and Alice Wallenberg Foundation (10 scholars awarded in all sciences to support some of the most successful researchers at Swedish universities, 10-year position)
2009 Best Paper Award, IEEE International Conference on Mobile Ad-hoc and Sensor Systems
2005 Swedish Research Council Senior Researcher Position (6-year position)
2004 Future Research Leader, Swedish Foundation for Strategic Research (17 6-year grants awarded among over 400 applicants in strategic research areas)
1998 & 1999 Postdoc Research Award, Swedish Foundation for International Cooperation in Research and Higher Education
1998 & 1999 Young Researcher Award, LM Ericsson's Foundation for Electrotechnical Research
1996 IFAC Young Author Prize (awarded every third year at the IFAC World Congress to a researcher under the age of 35)
1996 Young Researcher Award, Scania AB
1993 Peccei Award, International Institute of System Analysis, Laxenburg, Austria

National and international assignments of importance
2016–2018 Elected member of the IEEE Control Systems Society Board of Governors
2016– Member of the Advisory Board of the Einstein Centre Digital Future, Berlin
2016– Member of the External Advisory Committee for the Department of ICE, DGIST, Korea
2016– Member of the Research Strategy Group, WASP, Knut and Alice Wallenberg Foundation
2016– Member of the ERC Consolidator Grant panel on Systems and Communication Engineering
2016– Member of the IEEE Trans on Control of Network Systems Outstanding Paper Award Committee
2016 Member of the SSF Future Research Leaders Review Panel
2015– Member of the European Control Association Council
2015– Member of the Steering Board for the KTH Center for Resilient Critical Infrastructures
2015– Member of the Scientific Advisory Board for the Delta-NTU Joint Laboratory, Singapore
2015– Member of the Steering Committee for the ACM-IEEE International Conference on Cyber-Physical Systems (part of CPSWeek)
2015– Member of the Board of Drive Sweden, VINNOVA SIP on Automated Transport Systems
2014– Member of the Swedish Horizon 2020 Reference Group on ICT
2013– Member of the IEEE Simon Ramo Medal Committee (Chair from 2016)
2013–2015 Chair of the Swedish Research Council Evaluation Panel in Signals and Systems
2013–2015 Member of the Advisory Board for the Polaris Center For Future Cities, Porto
2009 Member of the IEEE Control Systems Society Board of Governors
2009– Steering Board and Management Team for Stockholm Strategic Research Area ICT TNG
2008–2013 Board of the Innovative Centre for Embedded Systems, KTH

2008–2011 Chair of IFAC Technical Committee on Networked Systems
2007–2010 Scientific Committee, European Embedded Control Institute, SUPELEC, France

Publications
155 refereed journal papers, 370 peer-reviewed conference papers, 23 book chapters, 2 edited books, 5 patents. Google Scholar h-index 56 (47 since 2011), citations 14 741 (10 386)

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

Selected editorial board memberships
2015 Guest Editor for the IEEE Control Systems Magazine Special Issue on "Cyber-Physical Security in Networked Control Systems"
2014 Guest Editor for the IEEE Trans on Automatic Control Special Issue on "Control of Cyber-Physical Systems"
2013– Editorial Board of the IEEE Trans on Control of Network Systems (Senior Editor from 2015)
2013– Editorial Board of the European Journal of Control
2011 Guest Editor for the IEEE Trans on Automatic Control Special Issue on "Wireless Sensor and Actuator Networks"
2008–2010 Editorial Board of the IEEE Trans on Automatic Control
2007–2012 Editorial Board of the IET Control Theory and Applications
2003–2006 Editorial Board of the IFAC journal Automatica
2000–2004 Topic-level Editor, UNESCO Encyclopedia of Life Support Systems

PhD supervision and postdocs
Supervisor and co-supervisor of 18 PhD's. Several of them are holding leading positions in academia and industry, e.g., TU Delft, Google, Ericsson, and Scania. Currently supervising 12 PhD students.
Past supervison of 30 postdocs. Several of them are holding leading positions, e.g., at University of Maryland, University of Melbourne, Tokyo Institute of Technology, Tsinghua University, DENSO, and Volvo. Currently supervising 7 postdocs.

Selected plenary presentations at major conferences
2017 29th Chinese Control and Decision Conference, Chongqing
2016 European Control Conference, Aalborg, Denmark
2016 IEEE International Conference on Autonomic Computing, Wurzburg
2015 15th International Conference on Control, Automation and Systems, Busan
2015 IEEE Int Conf on Event-based Control, Communication, and Signal Processing, Krakow
2014 IEEE Multi-Conference on Systems and Control, Antibes
2014 33rd Chinese Control Conference, Nanjing
2014 27th International Conference on Architecture of Computing Systems, Luebeck
2011 Internet of Things Industry Development Forum, Shanghai
2010 IFAC Distributed Estimation and Control in Networked Systems, Annecy, France
2008 Int Symp on Modeling and Optimization in Mobile, Ad Hoc and Wireless Network, Berlin
2007 15th IEEE Mediterranean Conference on Control and Automation, Athens
2006 25th Benelux Meeting on Systems and Control, Heeze

Organization of international conferences
2019 IPC Chair of the European Control Conference
2019 IPC Vice-Chair for Tutorial Sessions, IEEE Conference on Decision and Control
2017 Associate Editor for the area Networked Systems, IFAC World Congress
2015 Special Session Chair, IEEE Int Conference on Automation Science and Engineering
2014 Technical Associate Editor, IFAC World Congress
2013 IPC Co-Chair of the European Control Conference
2013 General Chair of the 5th ACM Workshop BuildSys
2011 Technical Editor, IFAC World Congress
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 major project leaderships
2017–2019 Sweden4Platooning, VINNOVA, Co-PI.

2017–2020 Control under Constrained Information, VR, PI.
2016–2021 SoPhy, Smart Systems, SSF, PI.
2016–2020 Engineering the Interconnected Society, Knut and Alice Wallenberg Foundation, PI.
2015–2018 Advancing System Integration in Process Industry, VINNOVA, Co-PI.
2015–2026 WASP, Knut and Alice Wallenberg Foundation, Co-PI.
2015– Digital Demo Stockholm, VINNOVA and multiple partners, Co-PI
2015–2019 oCPS, Training Network, EU Horizon 2020, Co-PI.
2015–2017 PlatoonSim, VINNOVA, Co-PI.
2015–2017 Collaborative manipulation with unmanned aerial vehicles, SSF, PI.
2014–2017 EU FP7 Project SPARKS, Co-PI.
2013–2016 COMPANION, EU FP7, Co-PI.
2013–2016 Network Fundamentals, Framework Program Project, VR, PI.
2010–2020 Wallenberg Scholar Grant, Knut and Alice Wallenberg Foundation, PI.
2009– Strategic Research Area ICT The Next Generation, Swedish Government, Co-PI. Director 2013–
2008–2012 STREP Projects VIKING and FeedNetBack, EU FP7, Co-PI.
2008–2010 Networked Embedded Control Systems, VINNOVA, PI.
2008–2010 Wireless Control, VR, PI.
2007–2009 Cooperative Guard and Search, VINNOVA and FMV, Co-PI.
2006–2009 Integrated Project SOCRADES, EU FP6, Co-PI.
2006–2016 ACCESS Linnaeus Centre, VR, Co-PI. Director 2009–2016. Founding member.
2006–2011 Network Interconnected Sensing and Control, Senior Researcher Position, VR, PI.
2005–2010 Network-embedded Control, Future Research Leader grant, SSF, PI.
2005–2009 Vehicle Control using Preview Information, VINNOVA, Co-PI.
2005–2007 Network-aware Control, VR, PI.
2004–2007 Integrated Project RUNES, EU FP6, Co-PI.
2004–2013 Network of Excellence HYCON and HYCON2, EU FP6, Co-PI.
2003–2005 Integrated Coding and Control, VR, Co-PI.
2003–2005 Electric Energy Management in Heavy Vehicles, VINNOVA, Co-PI.
2002–2005 RECSYS, EU FP5, Co-PI.
2002–2005 Centre for Autonomous Systems, SSF, Member of Executive Committee.
2002–2007 Towards a Self-regulating Internet, VR, Co-PI.
2002–2004 Embedded Control with Distributed Sensing and Computing, VR, PI.

CV and publication list
Complete CV with publication list available at https://people.kth.se/~kallej/cv.pdf

Berkeley, CA, January 19, 2017