

# 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

2020– Director, KTH Digital Futures  
2020 Chair, ERC Consolidator Grant Panel on Systems and Comm Engineering  
2020–2024 International Scientific Advisory Board of Eindhoven University of Technology  
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  
2017– Chair, IFAC Awards Committee  
2016– International Chair Adjunct Professor, NTNU  
2010–2027 Wallenberg Scholar, Knut and Alice Wallenberg Foundation (KAW)  
2007– Chaired Professor, Networked Control, Electrical Engineering and Computer Science, KTH

## Selected previous positions

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

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  
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

## Research expertise

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

## Publications and patents

210 refereed journal papers, 500 peer-reviewed conference papers, 27 book chapters, 2 edited books, 5 patents. Google Scholar h-index 79, citations 27 092

### **PhD supervision and postdocs**

Supervisor or co-supervisor of 22 graduated PhD's. Currently supervising 16 PhD students  
Past supervision of 41 postdocs. Currently supervising postdocs.

### **Selected recent plenary presentations at major international conferences**

2019 IEEE Conference on Control Technology and Applications; 2019 IEEE International Conference on Control and Automation; 2019 IFAC Workshop on Control of Transportation Systems; 2018 IFAC Symposium on Robust Control Design; 2018 ACM MobiHoc; 2017 Chinese Control and Decision Conference; 2016 European Control Conference; 2015 International Conference on Control, Automation and Systems; 2014 IEEE Multi-Conference on Systems and Control; 2014 Chinese Control Conference; 2010 IFAC Workshop on Distributed Estimation and Control in Networked Systems (NECSYS)

### **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  
2015–2019 Senior Editor of the IEEE Transactions on Control of Network Systems  
2013– Editorial Board of the European Journal of Control  
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**

2020 Technical Associate Editor, IFAC World Congress  
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 ongoing projects**

HiSS (Humanizing the Sustainable Smart City), Digital Futures, 2019-; 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  
Sweden4Platooning, VINNOVA, 2017-2020; Co-PI  
Control under constrained information, VR, 2017-2020; PI  
Societal-scale cyber-physical transport systems, SSF, 2016-2021; PI  
Engineering the Interconnected Society: Information, Control, Interaction, KAW, 2016-2020; PI  
WASP (Wallenberg AI, Autonomous Systems and Software Program), KAW, 2015-2029;  
Members of Research Strategy Group and International Management and Affiliations Group  
Collaborative manipulation with unmanned aerial vehicles, SSF, 2015-2020; PI  
Wallenberg Scholar, KAW, 2010-2027; PI  
Strategic Research Area Information Communication Technology The Next Generation (ICT TNG), Swedish Government, 2009-; Co-PI

*Stockholm, April 28, 2020*