

# Curriculum Vitae of Karl H. Johansson

## Academic degrees

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

## Selected current positions and assignments of importance

2024–2025 Vice President Diversity, Outreach & Development, IEEE Control Systems Society  
2021–2024 IEEE Founders Medal Committee  
2021– Executive Committee, C3.ai Digital Transformation Institute  
2020– Director, Digital Futures  
2020–2026 International Federation of Automatic Control (IFAC) Council  
2020– Member of the Advisory Board of Department of Automation, Tsinghua University  
2018– VR Distinguished Professor  
2018– Distinguished Professor of Overseas Academician, Zhejiang University  
2015–2025 Member of the European Control Association (EUCA) Council  
2015– Steering Board, Center for Resilient Critical Infrastructures, Swedish Civil Contingencies Agency  
2010– Wallenberg Scholar, Knut and Alice Wallenberg Foundation (KAW)  
2007– Chaired Professor, Networked Control, Electrical Engineering and Computer Science, KTH

## Selected previous positions

2019–2023 Chair, IEEE Control Systems Society Fellow Nominations Committee  
2022–2023 President, EUCA  
2020, 2022 Chair, ERC Consolidator Grant Panel on Systems and Communication Engineering (PE7)  
2019–2022 Scientific Council for Natural and Engineering Sciences, Swedish Research Council  
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 (PE7)  
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

2024 IEEE CSS Hendrik W. Bode Lecture Prize  
2023 IFAC Outstanding Service Award  
2022 Supervisor IEEE CSS Hybrid Systems TC Outstanding Student Paper Prize  
2020 Supervisor 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 (SSF)  
1998, 1999 Young Researcher Award, LM Ericsson's Foundation for Electrotechnical Research  
1996 IFAC Young Author Prize  
1996 Young Researcher Award, Scania AB  
1993 Peccei Award, International Institute of System Analysis, Laxenburg, Austria

## Publications and patents

>300 refereed journal papers, >600 peer-reviewed conference papers, 33 book chapters, 1 book, 3 edited

books, 7 patents. Google Scholar h-index 100, citations 47 496,  
<https://scholar.google.com/citations?hl=en&user=wWCUYdsAAAAJ>

### **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 34 graduated PhD's. Currently supervising 13 PhD students.  
Past supervision of 60 postdocs. Currently supervising 16 postdocs.

### **Selected plenary presentations at major international conferences and institutions**

IEEE CDC Bode Lecture, 2024; IEEE ISPC, 2023; IEEE MED, 2023; VEHITS, 2023; ICAT, 2023; IFAC CSC, 2022; IEEE ISIE, 2022; CoDIT, 2022; ACM-IEEE CPS-IoT Week, 2022; Dayawansa Lectures, TTU, 2022; GAITC, Hangzhou, 2022; Peking U Engineering Science Seminar, 2022; Distinguished ICON Seminar, Purdue U, 2022; CAA CVCI, 2021; IEEE SysTol, 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 Transp. Systems, 2019; Nicholson Distinguished Lecture, Sheffield U, 2018; IFAC Symp. on Robust Control Design, 2018; ACM MobiHoc, 2018; Pierce Lab. Seminar Series, MIT, 2017; CCDC, 2017; ECC, 2016; DREAMS Seminar, UC Berkeley, 2016; Int. Conf. on Control, Automation and Systems, 2015; IEEE Multi-Conf. on Systems and Control, 2014; CCC, 2014; IFAC NECSYS, 2010

### **Selected editorial board memberships**

2024– IFAC journal Annual Reviews in Control  
2022– Editorial Board of the ACM Transactions on Cyber-Physical Systems  
2018–2023 Editorial Board of the ACM Transactions on the Internet of Things  
2018–2023 Editorial Committee for Annual Review of Control, Robotics, and Autonomous Systems  
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, 2023 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 major ongoing projects**

AllDrive, Strategic Vehicle Research and Innovation, VINNOVA, 2022-2026; Co-PI  
ULTIMATE, Research and Innovation Actions Project, EU Horizon Europe, 2022-2025; Co-PI  
SUCCESS (Sustainable Cyber-physical Software-defined System Slicing), SSF, 2022-2027; Co-PI  
Digital Futures, Strategic Research Area, Swedish Government; PI  
Humanizing the Sustainable Smart City, Digital Futures, 2019-2024; Co-PI  
Distinguished Professor Grant, VR, 2018-2027; PI  
Wallenberg Scholar, KAW, 2010-2027; PI

*Stockholm, January 3, 2024*