

Sep 26, 2024

Curriculum vitae: Professor Tomas McKelvey

Dept. of Electrical Engineering, Chalmers University of Technology, SE-412 96 Göteborg
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Higher education qualifications: 1991, Master of Science in Electrical Engineering (Civilingenjör, Elektroteknik), Lund Institute of Technology, Lund, Sweden.

Doctoral degree: 1995, Automatic Control, Linköping university, Linköping Sweden. Dissertation title: *Identification of State-Space Models from Time and Frequency Data*. Supervisor: Prof. Lennart Ljung.

Postdoctoral positions:

January 1998 – March 1998: Postdoc visit at Department of Electrical Engineering, University of Newcastle, NSW, Australia

July 1999 – July 2000: Postdoc visit at Department of Electrical Engineering, University of Newcastle, NSW, Australia

Qualification required for appointments as a docent: 1999, Automatic Control, April 20, 1999, Linköping university, Linköping Sweden

Current Position: From December 2006 Full Professor in Signal Processing, Department of Electrical Engineering, Chalmers University of Technology, Sweden.

Previous employments

June 1985 – July 1986: Software engineer, Cosab AB, Svalöv, Sweden

1988 – 1991: Teaching assistant at the Department of Computer Science and Department of Information Theory, Lund Institute of Technology, Sweden

Jan. 1990 – July 1990: Software engineer, Exomatic AB, Teckomatorp, Sweden

June 1991 – Sept. 1991: Project employment at SAAB Military Aircraft AB, Linköping, Sweden

Oct. 1991 – May 1995: PhD student, Automatic Control, Dept. of Electrical Engineering, Linköping University, Sweden

June 1995 – Jan. 1997: Assistant Professor, Automatic Control, Dept. of Electrical Engineering, Linköping University, Sweden

Feb. 1997 – June 2000: Associate Professor, Automatic Control, Dept. of Electrical Engineering, Linköping University, Sweden

Aug. 2000 – Dec. 2006: Associate Professor (Docent), Signal processing, Dept. of Signals and Systems, Chalmers University of Technology, Göteborg, Sweden

Interruption in research: Parental leave 4 months in 1996 and 4 months in 1998.

Supervision:

Stefan Schagerberg (Lic, co-supervisor), 2003

Ingemar Andersson (PhD main supervisor), 2005

Joakim Gunnarsson (PhD main supervisor), 2007

Per Sjövall (PhD co-supervisor), 2007

Sima Shahsavari (PhD, main supervisor), 2011

Mikael Thor (PhD, co-supervisor), 2012

Markus Grahn, (PhD main supervisor) 2013

Tomas Bengtsson, (PhD main supervisor) 2016

Yinan Yu, (PhD, main supervisor) 2016

Johan Nohlert, (PhD, co-supervisor) 2018

Ayca Ozcelikkale, (Post-Doc), 2014-2016

Adrian Ilka, (Post-Doc), 2015-2017

Rickard Arvidsson (Lic, main supervisor, 2018)
Jonathan Lock (PhD, main supervisor, 2021)
Ebrahim Balouji (PhD, main supervisor, 2022)
Dhinesh Velmurugan (PhD, main supervisor, 2022)
Muhammedreza Mazidi (Post-Doc, main supervisor, 2021-2022)
Jacob Klintberg (PhD, main supervisor, 2023)

Grants awarded in competition (from 2012):

Diesel optimization, CERC competence center - Energy Agency, 2008-2012, PI, 947 kkr
Simclairs, European Defence Agency, 2010-2012, co-PI, 1.300 kkr
Robust Engine Systems, FFI - Energy Agency, 2010-2014, co-PI, 2.100 kkr
Image fusion for robust 3D reconstruction, FFI Vinnova, 2014-2015, PI, 1.530 kkr
Sensor Systems, Chase III-Vinnova, 2010-2014, co-PI, 3.963 kkr
Sensor Systems, Chase IV-Vinnova, 2015-2016, co-PI, 1.279 kkr
SICS, FFI Vinnova, 2013-2015, co-PI, 1.050 kkr
SAWE, FFI Energi Agency, 2015-2017, co-PI, 3.560 kkr
MultiMEC, FFI Vinnova, 2015-2018, co-PI, 2.070 kkr
GRENHAS, Marie-Curie EU, 2015-2017, PI, 1.727 kkr
VCloud II, FFI Vinnova, 2015-2018, co-PI, 1.600 kkr
Emission Aware Management, CERC -Energy Agency, 2015-2018, PI, 2.985 kkr
Sensor Systems, ChaseOn Vinnova, 2017-2021, co-Pi, 5.698 kkr
Passive and Multistatic Radar, NFFP7 Vinnova, 2018-2022, PI, 3.986 kkr
Root cause analysis with ML, FFI Vinnova, 2018-2021, PI, 941 kkr
Emission Aware Management II, CERC - Energy Agency, 2019-2020, PI, 1.900 kkr
Supervisory control of complex electrified propulsion subsystems, CERC - Energy Agency, 2019-2021, PI, 1.400 kkr
ETAVEP - Enablers for Testing Autonomous Vehicles at Existing Proving grounds, FFI-Vinnova, 2020-2022, co-PI, 7 947 kkr (618 kkr)
Online system inertia estimation by multivariate Fourier based non-parametric system identification methods, Chalmers AoA Energy, 2021-2022, PI 2.000 kkr
ICONOS: Intelligent Calibration of Networked Oxygen Sensors, Chalmers, AoA ICT, 2021, co-PI, 277 kkr
SESBC - The Swedish Electricity Storage and Balancing Centre, Swedish Energy Agency, 2022-2026, co-applicant, 54 Mkr
Passive and Multistatic Radar (cont), NFFP7 Vinnova, 2022-2023, PI, 560 kkr
Multitarget detection in digital radar, Swedish Foundation for Strategic Research, 2023-2024, PI, 1.371 kkr
Airborne Multistatic Radar Systems, NFFP8 Vinnova, 2023-2024, PI, 750 kkr
Distributed and autonomous radar networks, Vinnova (dnr 2023-00643), co-PI, 2.992 kkr
Airborne Multistatic Radar Systems 2, NFFP8 Vinnova, 2023-2024, PI, 4.580 kkr
Learned clutter distributions for radar detection in challenging maritime scenarios, WASP Ind. Postdoc Positions, 2025-2026, co-PI, 2.200 kkr

Commissions of trust etc.

Oct 1999 – present: Member of Program committee of IFAC Symposium on System Identification (SYSID), a triennial conference.
Jan 2000 – July 2002: Vice-Chairman of International Federation of Automatic Control's (IFAC) Technical Committee on Modelling, Identification and Signal Processing.
Sept 2001 – Nov 2002: Member of Chalmers education committee for Electrical Engineering undergraduate studies. (Linjekommitte E)
March 2002 – March 2005: Associate editor for Automatica, a Journal of the International Federation of Automatic Control.
July 2002 – July 2005: Chair of the International Federation of Automatic Control's (IFAC) Technical Committee on Modelling, Identification and Signal Processing.
July 2004 – July 2005: Member of program committee of the 16th IFAC World Congress 2005.

Oct 2002 – present: Member of the international review committee of the VOLVO Car Corporation industrial Ph.D. program (VIPP).

Jan 2005 – Sep 2011: Vice head of Department undergraduate education (Viceprefekt med ansvar för grundutbildningen), Department of Signals and Systems, Chalmers University of Technology, Sweden

March 2006 – Jan 2015: Associate editor for Journal of Control Science and Engineering.

Jan 2008 – Dec 2010: Member of the Chalmers board for undergraduate education (GUN).

Jan 2008 – Dec 2010: Vice chair of the Chalmers committee for quality assurance in undergraduate education.

Sept 2011– present: Member of the steering group of "Stroke Centrum Väst" at Sahlgrenska Akademin, Göteborgs Universitet.

Jan 2012 – Dec 2016: Member of Executive Board of CHASE, (Chalmers Antenna Systems, a VINN Excellence Center)

Sept 2012 – Dec 2016: Member of the advisory board of the Electrical Engineering undergraduate program, Chalmers.

Jan 2014 – present: Member of the board for Combustion Engine Research Center (CERC) at Chalmers.

May 2016 – July 2017: Associate editor for IFAC 2017 World Congress.

April 2011 – Dec 2013: Head of Signal Processing group.

Jan 2014 – Oct 2021: Head of Signal Processing group including responsibilities for personnel.

Jan 2015 – present: Deputy head of department of Signals and Systems (now Electrical Engineering) (proprefekt)

May 2019 – July 2020: Associate editor for IFAC 2020 World Congress.

Nov 2021–Present: Head of Division for Signal Processing and Biomedical Engineering

Oct 2022 – July 2023: Associate editor for IFAC 2023 World Congress.

Apr 2023–May 2023: Acting Head of Department, E2, Chalmers

May 2024–Aug 2024: Acting Head of Department, E2, Chalmers

Jan 2022–Dec 2026: Intelligent energy management research layer leader at the Swedish Electricity Storage and Balancing Center (SESBC)

Jul 2023–Dec 2026: Member of program committee at Swedish Electromobility Center (SEC)

PhD examination committees (from 2017)

March 8, 2017 Jonas Linder, ISY, Linköpings Universitet.

May 12, 2017 Johan Ljungqvist, Sahlgrenska Academy, Gothenburg University.

June 21, 2017 Rishi Relan, ELEC, Vrije Universiteit, Brussels.

Sept 14, 2017 Johan Swärd, Centre for Mathematical Sciences, Lund University.

Sept 20, 2018 Miguel Galrinho, School of Electrical Engineering KTH, Stockholm.

[May 3 2021] Mark Peter Balenzuela, Faculty of Engineering, University of Newcastle, NSW, Australia

May 14, 2021 Carlos Jorques Moreno, Department of Energy Sciences, Faculty of Engineering, Lund University

Oct 25, 2021 Tushar Chugh, Chalmers University of Technology, Gothenburg

May 5, 2022 Rodrigo Gonzalez Vidal, School of Electrical Engineering KTH, Stockholm.

Sep 16, 2022 Martin Ahnrbom, Centre for Mathematical Sciences, Lund University.

Aug 25, 2023 Mahmoud Ramezani Mayiami, University of Agder, Grimstad, Norge (1st opponent).

Oct 13, 2023 Alexander Karlsson, Electrical Engineering, KTH Stockholm.

Professional membership IEEE Senior Member since 2007

Publications data Bibliometric results from Google Scholar (Sep 26, 2024): Citations 4825,
h-index 32, i10-index 85
Complete list of publications.