

April 11, 2022

## **Curriculum vitae: Professor Tomas McKelvey**

Department of Electrical Engineering, Chalmers University of Technology, SE-412 96  
Göteborg

phone: +31 772 8061, fax: +46 31 772 1782, email: tomas.mckelvey@chalmers.se

**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:**

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)  
Dhinesh Velmurugan (Lic, main supervisor, 2018)  
Ebrahim Balouji (Lic, main supervisor, 2020)  
Jacob Klintberg (Lic, main supervisor, 2021)  
Jonathan Lock (PhD, main supervisor, 2021)  
Muhammedreza Mazidi (Post-Doc, main supervisor, 2021-)

**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

**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. (Linjekomite 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

#### **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.

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

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

**May 12, 2022** Mahmoud Ramezani Mayiami, University of Agder, Grimstad, Norge.

## **8. Selected commissions of trust**

## **10. Publications data** Bibliometric results from Google Scholar (April 11, 2022):

Citations	4011
h-index	29
i10-index	72

Complete list of publications.