

CV - Bo Bernhardsson Apr 2013

Engineering Degree

1986, MSc Electrical Engineering, Lund Institute of Technology

Doctoral Degree

1992, PhD in Automatic Control, Lund University. Thesis title: Topics in Linear and Robust Control, Supervisors: Per Hagander and Karl Johan Åström.

Post Doc

1992-1993, Institute for Mathematics and Its Applications, University of Minnesota. I was the only non-American researcher receiving funding from the Institute this year. I also had funding from the Sweden-America Foundation.

Docent

1998, Automatic Control, Lund University

Present Employment

Professor in Automatic Control 100%.

Previous Employments

- Ericsson, Lund, (May 2001-April 2010), Expert in Mobile System Design and Applications
- Professor in Automatic Control, LU, from Dec 1999 (one leave 2001-2010)
- Research Associate, Automatic Control, LU, 1993-1999
- Post Doc, University of Minnesota, 1992-1993
- Research Assistant, Automatic Control, LU, 1987-1992
- Research Assistant, Mathematics, LU, 1986-1987
- Lecturer, Department of TeleCommunications 1985 (two months)
- Research Engineer, Analytical Chemistry, LU, Nov1983-Feb1984 (25%)
- Teaching Assistant, Mathematics 1982-1986 (50% most of the time)

Interruption in Research

During 2001-2010 I was on leave from academia and worked at Ericsson as technical expert with responsibility area "Mobile System Design and Optimization". I worked with the launch of the 3G WCDMA system and the design of the 4G LTE system. The industrial research from this period is mostly documented in my patents. During the period I filed 30 patent applications. When last checked (2013-04-09) 22 of these had resulted in patent families with a granted patent in at least one country, 2 applications have been inactivated, and 6 are still

being processed. I did only have minor time for academic publishing during this period.

I have also been on parental leave for approximately 6 months in total during the period 1992-2001.

Supervisor for

- Johan Nilsson, Jan 1998
- Jörgen Malmberg, May 1998
- Erik Möllerstedt, Nov 2000
- Mattias Grundelius, Oct 2001
- Henrik Sandberg (co-supervisor), Dec 2004
- Ather Gattami (co-supervisor), June 2007
- Erik Johannesson (co-supervisor), Oct 2011
- Maria Henningsson (co-supervisor), May 2012
- Toivo Henningsson (co-supervisor), December 2012

Awards

- Honorable mention at best paper competition SIAM Activity Group of Linear Algebra 1994-1997 for the paper A formula for computation of the real stability radius.
- Honorable mention at IFAC world congress 1993 for the paper On simultaneous H2 optimization of several performance bounds.
- Scholarship from the Sweden-America Foundation 1992-1993.
- Saab-Scania Award in Automatic Control, 1990.
- Third Price in the Swedish National Mathematics Olympiad, 1980.

Other

- One of 10 principal investigators in the Linneaus Center LCCC.
- Associate editor for IEEE Transactions on Automatic Control, 2000-2001.
- Chairman of the Industrial Engineering and Management program 2000-2001 at LTH (during build up of the program).
- Member of board of Engineering Physics, LTH 1990-1992 and 1999-2001
- Organizer (with B. Wittenmark) of the national control conference Reglermöte 98.
- External examiner of approximately 20 PhD and Lic theses