CV for Jan Madsen, March 2020

A N Hansens Alle 31A, st, DK-2900 Hellerup; +45 60 17 10 97; jama@dtu.dk; 1501-1963; Married, two children

Current position:
Full Professor, Deputy Director of DTU Compute (400 people), Head of Embedded Systems Engineering (30 people).

Academic Degrees:
- 1992 *Ph.D. in Computer Science*, Technical University of Denmark, Denmark.
- 1986 *M.Sc. in Electrical Engineering*, Technical University of Denmark, Denmark.

Employment track & research affiliations:
- 2002 – Full Professor, Dept. of Applied Mathematics and Computer Science, Technical University of Denmark.
- 2010 – Deputy Director, DTU Compute.
- 2008 – Head of section for Embedded Systems Engineering (ESE), DTU Computes.
- 1996 – 2002 Associate Professor, Dept. of Informatics and Mathematical Modelling, Tech. University of Denmark.
- 1992 – 1996 Assistant Professor, Dept. of Information Technology, Tech. University of Denmark.
- 1991 – 1992 Postdoc, Department of Computer Science, Technical University of Denmark.

Honors, awards & funding
- EDAA DATE Fellow, 2019
- IEEE-CEDA Outstanding Contribution Award, 2019
- DTU's Award for Scientific Advise (the DSB IC4 train braking incident investigation), 2013.
- Best Paper Awards, MECO 2013, CASES 2009
- Nominated for Research Project of the Year 2012, Biologically Inspired Hardware Cell Architecture.
- Jorck's Foundation Research Award for outstanding research activities in HW/SW Codesign, 1995.
- Coritt's Foundation Travelling Scholarship, 1995.
- Has since 2000 attracted national and EU funding for a total amount of **60+ mio DKK** (DTUs share).

Selected professional activities
- 2018 – Member of Advisory Board of Digital Hub Denmark.
- 2018 – Health Technology Expert for the Innovation Expert Panel of New North Zealand Hospital.
- 2017 – Member of ATV (The Academy of Technical Sciences).
- 2016 – Co-Founder of the IoT Centre at DTU.
- 2016 – Member of the DTU Proof-of-Concept Committee.
- 2015 – Co-Founder and Member of the Management for CACHET (Copenhagen Centre for Health Technology).
- 2015 – National ICT expert for EU H2020.
- 2013 – 2017 Member of the review panel of the Swiss Research Program Nano-Tera.
- 2010 – 2016 Editorial Board of the IEEE journal "*Design & Test*".
- 2009 – 2020 Member of the steering group of Infinit, Innovation Network for ICT.
- 2009 – 2016 Member of ARTEMIS-IA and its Strategic Research Agenda working group.
- 2008 – 2012 Member of the Governing Board of ARTEMIS JU (EU PPP Program).
- 2008 – 2011 Strategic Management Board for ArtistDesign (EU Network-of-Excellence, Embedded Systems).
- 2007 – 2009 Swedish Research Council (Vetenskapsrådet), Member of the Computer Science Panel.
- 2007 – Member of EDAA (Electronic Design Automation Association). Since 2017, Member of the Steering Board.

Patents
- Co-inventor of patent notification, Mar 12, 2018. Smart wound dressing for early diagnosis of surgical site infection.
- Inventor of patent EPC 16203030.8-1371, Dec 16, 2016. Complementary pneumatic digital logic for on-chip control of microfluidic lab-on-a-chip devices.
- Patent no.: US 20110307734, Dec 15, 2011. Biologically Inspired Hardware Cell Architecture.
- Patent no.: EP 2370937, Oct 5, 2011. Biologically Inspired Hardware Cell Architecture.
- Inventor of patent WO/2010/060923, Biologically Inspired Hardware Cell Architecture, published 03.06.2010.

Research
Methods and tools for systems engineering of computing systems. Present research covers embedded systems-on-a-chip, wireless sensor networks (Internet-of-Things), microfluidic biochips (Lab-on-Chip) and synthetic biology. Has supervised 39 PhD students (to completion) and is currently supervising 3 PhD students.

Publication and citation statistics
More than **200** peer-reviewed journal and conference papers, 13 book chapters, 3 books and 4 edited books. More than 150 invited talks and keynotes. Several best paper nominations, 2 **best paper awards** (MECO 2013, CASES 2009), 1 paper among the 30 most influential papers from 10 years of Design Automation and Test in Europe (DATE), 3 papers among the highly-cited papers in System Codesign and Synthesis (one in the top 5 cited papers). Citations: 2962, h-index: 32, i10-index: 75 (Google scholar, March 29, 2020).

Chairing scientific events:
General Chair of DATE 2018, NOCS 2012, NORCHIP 2012, CODES 2001; General Vice Chair of DATE 2017; Program Chair of CODES+ISSS 2011, DATE 2007, CODES 2000; Vice-Program Chair DATE 2006; Tutorial Chair for DATE 2006; Workshop Chair for CODES+ISSS 2005. Member of conference Steering Committees CODES+ISSS since 2000, NOCS 2012-2015, NORCHIP 2003-2016. Member of the Technical Program Committee for numerous conferences.