Curriculum Vitae: Mats Daniels

Personal Details

Name: Mats Daniels

Residential Address: Axsjövägen 20, 744 51 Morgongåva, Sweden.

Born: May 28, 1956
Telephone: +46-708 918262
Email: mats.daniels@it.uu.se

www: http://www.it.uu.se/katalog/matsd

Work Experience

Professor at Uppsala University, Uppsala, Sweden since December 2017

- Senior lecturer at Uppsala University, Uppsala, Sweden, February 2000 November 2017.
- Guest Lecturer at La Trobe University, Melbourne, Australia, July 1989 June 1990.
- Lecturer at Uppsala University, Uppsala, Sweden, July 1986 January 2000.
- PhD Student at Uppsala University, Uppsala, Sweden, April 1981 June 1986.
- Teaching Assistant at Uppsala University, Uppsala, Sweden, August 1980 March 1981.
- Programmer, ADB Gruppen, Malmö, June 1980 August 1980.

Academic Qualifications

- Professor in Computer Science with Specialization in Computer Science Education Research at Uppsala University, Uppsala, Sweden, December 1, 2017.
- Excellent Teacher at Uppsala University, June 2014.
- Docent in Computer Science with Specialization in Computer Science Education Research at Uppsala University, Uppsala, Sweden, April 18, 2013.
- Doctor of Philosophy in Computer Science with specialization towards Computer Science Education at Uppsala University, Uppsala, Sweden, April 9, 2011.
- Promoted to Senior Lecturer, February 2000.¹
- Licentiate in Computer Technology at Uppsala University, Uppsala, Sweden, December 20, 1985.
- Master of Science in Engineering Physics, specializing in Computer Technology at Uppsala University, Uppsala, Sweden, December 22, 1980.

Distinctions and Awards

In this section I especially want to highlight the ACM SIGCSE award for Lifetime Service to the Computer Science Education Community 2017, but also the best paper award at the ACE conference 2009 and IEEE Chapter Achievement Award to the IEEE Nordic Education Society Chapter 2006 when I was chair.

- ACM SIGCSE award for Lifetime Service to the Computer Science Education Community, 2017.
- Recognition of Service Award, ACM 2014.
- Appointed Excellent Teacher at Uppsala University, June 2014.
- Nominated to become Distinguished member of ACM 2012.
- Best paper award at ACM Australasian Computing Education conference 2009 for Evolution of an International Collaborative Student Project.
- IEEE Chapter Achievement Award to the IEEE Nordic Education Society Chapter 2006 when I was chair.
- "Æresdiplom", awarded by the IEEE Norway Section 2005.
- IEEE Senior member since 2004.
- "IT-priset", awarded by the Information Technology Engineering student cohort 2002.
- Recognition of Service Award, ACM 1999.

¹ I was promoted to a position as Senior Lecturer, based on an external evaluation, where my research qualifications were assessed as being on par with the requirements for a PhD degree. This means that I had sufficient material for a PhD thesis in 2000. However, at that time I had no formal thesis adviser, so I did not compile the material into a thesis. Instead, I continued to be an active researcher, producing new results, and when Arnold Pears became my formal thesis adviser in 2010, I finally took the step to write a PhD thesis. Most of the research contributions contained in my formal PhD thesis (2011) was produced after my promotion to Senior Lecturer and consequently go beyond the research achievements that were assessed to be sufficient for a PhD degree already in 2000.

- Recognition of Service Award, ACM 1998.
- Recognition of Service Award, ACM 1997.

Supervision and Examination of PhD Students and Master Students

A curious fact is that I did supervise Nicklas Zennström, the founder of Skype, in his master thesis work.

- In the grading committee for Maria Lindfors when she earned her PhD at Umeå University with the title "Kunskap är vad du vet, och vet du inte kan du alltid Googla", Sweden, 2018.
- MSc thesis examiner for Daniel Sigurgeirsson at Reykjavik University, Reykjavik, 2017.
- I am main supervisor for Virginia Grande, who started her PhD studies in September 2016.
- Examined the PhD thesis of Neville Williams at Flinders University, Adelaide, Australia, 2015. The title was: Assessing the Quality of Computer Science Courses Using Taxonomy Tools.
- Main supervisor for Mattias Wiggberg at Uppsala University when he earned his PhD with the thesis "Computer Science Project Courses – Contrasting Students' Experiences with Teachers' Expectations" 2010.²
- Main supervisor for Mattias Wiggberg at Uppsala University when he earned his Licentiate degree with the thesis "Unwinding Processes in Computer Science Student Projects" 2008.
- Examined the master thesis of Annegret Goold, Deakin University, Geelong, Australia, 1999.
- I have been the supervisor/examiner for numerous master and bachelor thesis projects at Uppsala University since mid-eighties, averaging approximately five per year.
- I am the main examiner for master theses at the Master Program in Computer Science at Uppsala University since 2016.

Research

From 1980 till mid-1990's I did traditional Computer Science research. I wrote my master thesis in the fall 1980 about a real-time operating systems kernel for the Intel-8086 processor at Uppsala University. This was followed by being enrolled as a PhD student at Uppsala University, where my work lead to a Licentiate thesis 1985 on using formal methods to describe and analyze communication protocols and computer architectures with a special focus on capturing real-time aspects. I restarted this line of research as a guest lecturer 1989-1990 at La Trobe University, Melbourne, Australia together with Professor Tharam Dillon. This phase of my research concluded with some publications in the first half of the 1990's.

In the mid-1990's I started to work in the computing and engineering education research area, since I decided that I should get a firmer base for my work in education, both in the courses I taught myself and more importantly in being part of planning and running education degree programs. Computing and engineering education research was not an established field at this point in time, which in many ways meant that I was part of forming this area of research. I initiated both the Computer Science Education Research Groups International (CSERGI) and the Uppsala Computer Science Education Research Group (UpCSERG) 1998. CSERGI consisted of members from Monash University, Melbourne, Australia, The Open University, Milton Keynes, UK, University of Kent at Canterbury, UK, Uppsala University, and University of Texas at Austin in the US. CSERGI is no longer active, but the local group has expanded and is now a strong research group renamed to Uppsala Computing Education Research Group (UpCERG www.it.uu.se/research/group/upcerg).

Part of forming the computing and engineering education research area was to find out how to conduct such research. This work is illustrated by chapter four in my thesis, where I describe a framework for subject didactic research. Much of my work has been conducted in an action research manner. A central theme in my thesis is aspects of using Open-Ended Group Projects in education, with a particular eye towards the acquisition of professional competencies. I have since my thesis further developed my work on the intercultural competence, e.g. what it is, how progression can be obtained, how the competence can be assessed, how it fits within education programmes, and not least how to motivate students to develop their professional competencies. The focus is on the exit end of education programmes and on what is needed in the work place. This research is central in my role as responsible for the Examination and learning of disciplinary and professional competencies area in the Centre for Discipline-Based Education Research in Mathematics, Engineering, Science and Technology (MINT www.mint.uu.se) since its inception in 2013.

² In 2000, long before I defended my PhD thesis, I was promoted to a position as Senior Lecturer, based on an external evaluation where my research qualifications until then were assessed as being on par with the requirements for a PhD degree. Having been assessed to have these qualifications, I was later appointed to be main supervisor for Mattias Wiggberg's thesis work although I had then still not formally received my own PhD degree.

Another area of research is a spin-off from the IT in Society class that I have taught since 1998. The class of 2009 produced a White paper that the Uppsala County Council used to land a 7 million € three year development project from the European Committee. The desire to complement this development project with a research angle lead to the start of the Deployment of Online Medical records and E-health services consortium (DOME, https://domeprojekt.wordpress.com) in 2012. DOME was initially supported by a 10 million SEK funding from VINNOVA. My part of the consortium is on the role of professional competencies, both for the health care staff and the systems developers, in deploying and operating electronic access to patient records and other services offered by the health care sector.

Research Funding

Over the years I have attracted over 13 million SEK, where I have been the main grant holder for over 8 million SEK. The grants I have received have been highly important for my work and two of them especially so. The first is the grant from the council for renewal of higher education in 1997 for a project named *International student cooperation in project form*, also called the RUNESTONE project. This was a three year project around organizing a collaboration between students in Sweden and the US. This project was the main base for three PhD theses (Anders Berglund, Uppsala University, Marta Hause, The Open University, UK, and Mary Last, Kingston University, UK) and a number of publications. The course where the RUNESTONE project was launched still runs under a different name at Uppsala although now with partners in Finland and China. The second major grant is from the same organization in 2004 to set up and run a national center for pedagogical development concerning technology education in a societal and student oriented context, CeTUSS (www.cetuss.se). The center is still active, but at a much lower intensity than during 2004 – 2007, when funding was provided. In CeTUSS I have arranged nine national workshops and two courses.

I also want to point out that much of my funding has been regarding development rather than pure research, but working in an action research manner and in projects that span a reasonable amount of time implies that research also is done. Even short development projects can be seen to fit in my research as it is part of a continuous spiral of research-development in which the particular development is taken place.

The table below contains research and development funding obtained:

Year	Funder	Amount (SEK)	Description of Focus		
2018	The European Community	3.500.000	CoM_n_Play-Science. A 33.8MSEK project led by Micail Giannakos, NTNU, Trondheim, Norway.		
2016	The European Community	55.000	Education for the development of soft skills in Vietnam. Travel to Vietnam is covered in addition to the 55.000SEK.		
2015	Division for Development of Teaching and Learning Uppsala University	200.000	Competence Development in Project Courses. Application together with Åsa Cajander. Co-funded by the Department of Information Technology, Uppsala University.		
2014	Faculty of Science and Technology, Uppsala University	120.000	Progression in advanced level education		
2013	Department of Information Technology, Uppsala University	125.000	CS-Wed communication training, ability to collaborate, and progression together with Aletta Nylén		
2013	ERASMUS	20.000	Study visit at Reykjavik University, Iceland		
2013	VINNOOVA	319.000	My part of DOME that was run by Åsa Cajander.		
2012	VINNOVA	215.000	My part of DOME that was run by Åsa Cajander.		
2012	Division for Development of Teaching and Learning Uppsala University	200.000	Development of Peer Reviewing and Industry Reviewing as Educational Formats. Application together with Åsa Cajander. Co-funded by the Department of Information Technology, Uppsala University.		
2012	Department of Information Technology, Uppsala University	70.000	The use of industry partner reviewing of software development processes in teaching of HCI. Application together with Åsa Cajander.		
2012	Department of Information Technology, Uppsala University	50.000	To learn to learn computing. Application together with Anders Berglund.		
2011	Faculty of Science and Technology, Uppsala University	90.000	Professional competencies: specification – deploying - assessment		
2011	Division for Development of Teaching and Learning Uppsala University	200.000	ICT and global distributed projects. Co-funded by the Department of Information Technology, Uppsala University.		

2011	Department of Information Technology, Uppsala University	65.000	Research Time for Teaching Staff		
2011	International Office, Uppsala University	25.000	Visit to Bilkent University, Ankara, Turkey.		
2011	The Faculty of Educational Sciences, Uppsala University	83.000	Funding for organizing a seminar series. Application together with Åsa Cajander.		
2011	Faculty of Science and Technology, Uppsala University	90.000	Research on the specification of competences.		
2010	Faculty of Science and Technology, Uppsala University	160.000	Project work: Progression and identity		
2010	Department of Information Technology, Uppsala University	90.000	Research Time for Teaching Staff		
2010	Division for Development of Teaching and Learning Uppsala University	200.000	Examination of professional competences in engineering education. Co-funded by the Department of Information Technology, Uppsala University.		
2009	Department of Information Technology, Uppsala University	35.000	Development of a method for communication inspired by Constructive Controversy.		
2008	Faculty of Science and Technology, Uppsala University	120.000	Support for evidence based course development		
2007	Faculty of Science and Technology, Uppsala University	370.000	Network for workplace related education, including building a resource database		
2007	Swedish Agency for Networks and Cooperation in Higher Education	400.000	CeTUSS		
2007	Swedish Agency for Networks and Cooperation in Higher Education	60.000	My part of NADIMI that was run by Sabine Koch, where I coordinated different sites in giving net courses in the health informatics area.		
2004 – 2006	Council for the Renewal of Higher Education	4.100.000	CeTUSS		
2004	Faculty of Science and Technology, Uppsala University	120.000	New formats for running courses		
2002 – 2004	Faculty of Science and Technology, Uppsala University	455.000	Distributed teaching with local control		
2001	SIDA	45.000	Sweden - South Africa collaboration. Application together with Shirley Booth		
1999	Uppsala University	90.000	Developing communication between students in the RUNESTONE project		
1998	The NyIng consortium	300.000	RUNESTONE		
1998	STINT	80.000	Guest lecturer: John Impagliazzo		
1997 – 2000	Council for the Renewal of Higher Education	900.000	RUNESTONE		
1997	Swedish Research Council for Engineering Sciences	225.000	Guest professor: Nell Dale		
1996 – 2002	Council for the Renewal of Higher Education	110.000	Travel support to attend and present at six educational conferences.		
Sum	13.287.000				

Presentations at Conferences

I have presented papers and been on panels at a number of international and national conferences, mostly international and in the computing and engineering education research area, and all of which use peer reviewing. Most of these are listed below and I like to especially point out that I have been keynote speaker at the following conferences: the 48th ACM Technical Symposium on Computer Science Education, 21st Innovation and Technology in Computer Science Education conference, the first International Conference on Computer Supported Education, and at the fifth International Conference on WEB Information Systems and Technologies, and invited speaker at the Australasian Computing Education Conference, where I am one of the three most frequent contributors, in Adelaide 2013 and at the ASEE Global Engineering Education Colloquium in Istanbul.

- · Keynote speaker at
 - o 48th ACM Technical Symposium on Computer Science Education, Seattle, USA, 2017.
 - 21st ACM Innovation and Technology in Computer Science Education (ITiCSE), Arequipa, Peru, 2016.
 - 1st International Conference on Computer Supported Education (CSEDU), Lisbon, Portugal, 2009.
 - 5th International Conference on WEB Information Systems and Technologies (WEBIST), Lisbon, Portugal, 2009.
- Invited speaker at ACM Australian Computing Education Conference, Adelaide, Australia, 2013.
- Invited speaker at ASEE Global Engineering Education Colloquium, Istanbul, Turkey, 2007.
- Invited speaker at Informa Examination i högskolan, Stockholm, Sweden, 2014.
- Presentations of scientific papers and panels at the following conferences:
 - ACM Australasian Computing Education/Australasian Computer Science Education conference (ACE/ACSE), Sydney, Australia 2015, Perth, Australia 2011, Brisbane, Australia 2010, Wellington, New Zealand 2009, Wollongong, Australia 2008, Ballarat, Australia 2007, Newcastle, Australia 2005, Adelaide, Australia 2003, Brisbane, Australia 1998, and Melbourne, Australia 1997.
 - o Australian Computer Science Conference, Brisbane, Australia 1988.
 - IFIP Computer Hardware Description Languages and their applications, Amsterdam, Holland 1987.
 - IEEE Conference on Software Engineering Education and Training (CSEE&T), Covington, USA, 2002.
 - o IEEE annual global Engineering Education Conference (EDUCON), Madrid, Spain 2010.
 - o Effective Project Work in Computer Science (EPCoS) Workshop, Exeter, UK 1999.
 - O IEEE Frontiers in Education conference (FIE), Indianapolis 2017, Eire, USA 2016, Madrid, Spain 2014, Oklahoma City, USA 2013, Seattle, USA 2012, Rapid City, USA 2011, Washington DC, USA 2010, San Antonio, USA 2009, Saratoga, USA 2008, Milwaukee, USA 2007, San Diego, USA 2006, Indianapolis, USA 2005, Boulder, USA 2003, Boston, USA 2002, Kansas City, USA 2000, San Juan, Puerto Rico 1999, Tempe, USA 1998, and Pittsburgh, USA 1997.
 - o Formal Descriptions Techniques, Bern, Schweiz 1994.
 - Formal Techniques in Real-Time and Fault-Tolerant Systems, Nijmegen, Holland 1992.
 - o ACM Innovation and Technology in Computer Science Education (ITiCSE), Bologna, Italy 2017, Arequipa, Peru 2016, Canterbury, UK 2013 and Thessaloniki, Greece 2003.
 - Nordplus, Interdisciplinary Teamwork Skills for the 21st Century (Its21!), Uppsala, Sweden 2017.
 - Swedish national agency for higher education National quality conference (Kvalitetskonferensen), Luleå, Sweden 1998, Eskilstuna, Sweden 2000, and Norrköping, Sweden 2001.
 - IEEE Meeting the growing demand for engineers and their educators 2010-2020, Münich, Germany 2007.
 - National development conference for engineering education, Norrköping, Sweden 2011 and Lund, Sweden 2009.
 - Nordic workshop on program correctness, Göteborg, Sweden 1991 and Aalborg, Denmark 1990.
 - NU (the joining of Netlearning and Utvecklingskonferensen), Stockholm, Sweden 2010 and Kalmar, Sweden 2008.
 - o ReflekTori, Helsinki, Finland 2007.
 - o IEEE/IPSJ Symposium on Applications and the Internet (SAINT), San Diego, USA 2001.
 - o SEFIs annual conference, Uppsala, Sweden 2006.
 - SEFI workshop, Delft, Holland 1999.

- ACM Special Interest Group in Computer Science Education symposium (SIGCSE), San Jose, USA 1997 and Philadelphia, USA 1996.
- o Council for the renewal of higher education National development conference for higher education (Utvecklingskonferensen), Gävle, Sweden 2003.
- Uppsala University Conference in pedagogic development, Uppsala, Sweden 2015, 2011, and 2009.

Publications

I have published 30 (and two pending) journal publications, 88 conference publications in peer reviewed contexts, and five book chapters, see list below. My h-index is 21, my i10 index is 41, and the total number of citations to my publications is 1397 according to Google Scholar on June 14, 2018.

Teaching

I have always been interested in education. This is manifested in my activities, from teaching and supervision on an individual person and course level, through being involved in development and running education programs, working with educational issues as director of studies at the department since 1992 as well as through involvement in educational conferences and organizations, on to conducting computing and engineering education research.

A guiding light in my role in education is to approach the area in a scholarly manner similar to how I work in research. My view of learning is (social) constructivistic and I thus strive to create learning environments in which students are active and in focus. I also put high value on variation in both learning environments and examination formats, where crucial ingredients are to inspire and motivate the students based on a sound pedagogical foundation. What they learn is another important component in my view of education, the content should be relevant for them and this include the general development as a person, especially in becoming a professional in the chosen field, i.e. to develop professional competencies.

My view of learning and my strive to set up suitable learning environments have lead me to define and develop the Open-Ended Group Project (OEGP) concept. This has been done by developing theories in an action research manner about using the OEGP concept in achieving holistic learning environments in which the students are active learners. This approach is most visible in the IT in Society class, but it is also an important aspect in my role as a coach to teachers at the department.

Experience from Teaching

I have been an active teacher since 1980 and I have on average taught three to four courses per year till early 1990's and since then typically one or two per year. These courses range from very basic to the upper end of the advanced level.

I have taught, as the main teacher, the following courses at Uppsala University:

- Advanced Computer Architecture, advanced level, 7,5 credits
- Compiler Theory, advanced level, 5 credits
- Computer Aided Design, advanced level, 7,5 credits
- Computer Architecture, basic level, 5, 6, and 7,5 credits
- Computer Networks, basic level, 5 and 7,5 credits
- Computer Systems I, 15 credits
- Computer Systems II, 13,5 credits
- Distributed Systems, advanced level, 5 and 7,5 credits
- Information Technology, basic level, 5 and 7,5 credits
- IT in Society, advanced level, 15 credits
- Operating Systems, basic level, 5, 6, and 7,5 credits

Of these courses I have developed the Computer Aided Design, the Distributed systems and the IT in society course from scratch. I have also developed labs and assignments in all of the courses.

I was a staff member at La Trobe University, Melbourne, Australia, where I gave a course in Distributed systems for 70 students 1989.

I was a member of the team producing a computer literacy course (datakunskap) in cooperation with members from five other universities, the Swedish TV, the Swedish radio, and a publishing company (Liber/Hermods). The course was first given 1985.

Teacher Training Courses

Below is a table including information about the teacher training courses I have attended. I have however obtained much of what would count as teacher training as part of my research and development work in computing and engineering education research.

Teacher Training Course	Year	Organiser	Time
Student centered learning		Uppsala University	½ day
Identity and learning		Uppsala University	1 day
Course for thesis supervisors and advisors		Uppsala University	1 day
Communication and leadership		Uppsala University	3 days
Mentoring		Uppsala University	1 week
Supervision of PhD students		Uppsala University	2 days
The learning experience: Student perspective		CeTUSS	2 days
Cross-cultural communication	2005	Uppsala University	1 day
Pedagogic portfolio building for practitioners and beginners	2002	Uppsala University	0,5 day
Perspectives on learning	2000	KK stiftelsen	5 weeks
Examination – one of the most important aspects for students' learning	1999	Uppsala University	0,5 day
New methods for active leadership	1997	Uppsala University	3 days
Project oriented education – the new teacher role	1997	Uppsala University	2 weeks
Pedagogic course for experienced teachers	1988	Uppsala University	1 week
Pedagogic days for teachers in computing science	1987	Uppsala University	2 days
Teaching training course	1980	Uppsala University	2 weeks
	ı	Sum: 13 w	eeks and 6 days

General Partaking in Education, Research, and the Society

To play an active and positive part in the society is together with performing world leading research and offering high quality education important goals for Uppsala University. This is often presented as three separate areas; Education, Research, and Outreach. I find it difficult to separate my activities into these areas since most of the activities involve both education and research. I also have an ambition to anchor education and research in a societal context in order to achieve a holistic understanding. My research on education with a focus on professional competencies is an example of this integration.

Most of what I list under this heading could be sorted under either teaching or research, and often under both. I have chosen to put the most obvious examples of teaching and research under those headings and to list things I see more as being part of a community under this heading. This includes being part of committees and boards and performing

service to both local and international communities. To be part of different communities is an essential part of securing quality in ones actions, for example, presenting pedagogical ideas both locally and internationally is of utmost importance in conducting scholarly work as an educator. This is a diverse section and as a summary I like to point out that I have been continuously active in the running of the department since early in my employment and that I have since the mid-90's been involved in forming the research community in computing and engineering education.

Appointments/Board Participation

An important part of community work is to be part of decision making. My most prominent positions locally at Uppsala University are that I have been director of studies since 1992 and am responsible for the Examination and learning of disciplinary and professional competencies area in the Centre for Discipline-Based Education Research in Mathematics, Engineering, Science and Technology (MINT) since its inception in 2013. Running the national center for pedagogical development concerning technology education in a societal and student oriented context (CeTUSS) is perhaps the most influential position nationally and on the international arena I would like to point out that I am the coordinator for future sites for the ACM Innovation and Technology in Computer Science Education (ITiCSE) conference.

- Acting Division Head for Computer Systems at the Department of Information Technology May 2015-March 2016.
- Responsible for the Examination and learning of disciplinary and professional competencies area in the Centre for Discipline-Based Education Research in Mathematics, Engineering, Science and Technology (MINT) since 2013.
- Member of the board at the department of Information Technology 2012-2015.
- Past chair for the IEEE Nordic Education Society Chapter since 2009.
- Chair for the IEEE Nordic Education Society Chapter, 2005-2008.
- ACM Site coordinator for the ITiCSE conference, 2005-2018.
- Head of the national center for pedagogical development concerning technology education in a societal and student oriented context, CeTUSS since its inception 2004.
- Vice-chair for the IEEE Nordic Education Society Chapter 2001-2004.
- Vice Division Head for Computer Systems at the IT department 1999-2016.
- I had a leading role in the NyIng group at Uppsala University. The purpose of this group was to develop a model for managing education programs. 1998–1999.
- I had a leading position in the team that designed and implemented the Information Technology Engineering Program (ITP) 1993–1995.
- Director of studies at the department since January 1992.
- Vice-chair (stf. prefekt) at the Department of Computer Systems (DoCS) July 1991 June 1992.
- I have been a member of the following educational program boards:
 - Computer Science Program (DVP)
 - o Electrical Engineering Program (EIP)
 - Engineering Physics Program (TFP)
 - o Information Technology Program (ITP)
 - o Mathematical and Natural Sciences Program (MNP)
- Member of the board at the Department of Computer Systems (DoCS) 1985–1999.

Appointments as External Expert Evaluator

Here I would like to point out my work as evaluator for Monash University in their preparation for an upcoming assessment of research quality in Australia. I investigated the research output of their computing education research group.

- Aiding Reykjavik University set up their internal quality assurance program 2014.
- Appointed by the Swedish National Agency for Higher Education as a member of the committee evaluating IT education in Sweden 2012-2013.
- Committee member of the IEEE Taylor L. Booth Education Award since 2010.
- Committee member of the IEEE Distinguished Service in a Pre-College Environment Award since 2010.
- Committee member of the IEEE Computer Science and Engineering Undergraduate Teaching Award since 2010.
- Committee member of the IEEE/ASEE Helen Plant Award since 2010.
- Judge in the IEEE Computer Science History Competition 2007.
- Assessor for Monash University's mock run of Research Quality Framework: Assessing the quality and impact of research in Australia 2006.

- Committee member of the IEEE Mac van Valkenburg Early Career Teaching Award 2006.
- Opponent on Boris Koldehofe at Chalmers, Gothenburg, Sweden when he defended his licentiate thesis "Collaborative Environments: aspects in Communication and Educational Visualization" 2003.
- Evaluator of applicants for the South Africa National Research Foundation (NRF) 2001.
- Evaluator for the promotion of Mordechai Ben-Ari to a tenure position at Weizman Institute of Technology, Israel, 1999.

Service in International Conference Programme Committees

Here being conference chair of both the second and the nineteenth ACM Innovation and Technology in Computer Science Education) ITiCSE conference when it was run in Uppsala (1997 and 2014) and program chair for the ASEE/IEEE Frontiers in Education (FIE) conference (2013) are the most important merits.

- Member of the Program Committee for LaTiCE since 2016
- Conference co-chair for the ACM ITiCSE, Uppsala 2014.
- Program chair for the ASEE/IEEE FIE, Oklahoma City, USA 2013.
- Evaluation chair for the ACM ITiCSE conference, Haifa, Israel, 2012.
- Member of the Program Committee for ReflekTori 2007-2010.
- Poster chair for the ACM ITiCSE conference, Dundee, Scotland, 2007.
- Poster chair for the ACM ITiCSE conference, Aarhus, Denmark, 2002.
- Member of the Program Committee for the ACM Australasian Computing Conference (ACE) conference since 2000.
- Program co-chair for the ACM ITiCSE conference, Krakow, Poland 1999.
- Program co-chair for the ACM ITiCSE conference, Dublin, Ireland 1998.
- Conference co-chair for the ACM ITiCSE, Uppsala 1997.

Other Merits

The forming of the Uppsala Computer Science Education Research group (UpCSERG) and the Computer Science Education Research Groups International (CSERGI) on my initiative is something I am proud of. I am also quite pleased at having been selected as one to interview in the ACM Computing Educators Oral History Project since I view that as a proof of recognition in the community. This project aims at collecting and presenting life stories of individuals in computing education that can serve as role models (http://www.cs.southwestern.edu/OHProject1/).

- Member of the Editorial Advisory Board for ACM Inroads magazine 2016 present.
- Was interviewed in the ACM Computing Educators Oral History Project 2011.
- Nominated for election to the board of the ACM Special Interest Group in Computer Science Education both 2001 and 2004.
- Associate editor for ACM Journal on Educational Resources in Computing (JERIC) 2000 2005.
- Initiating CSERGI 1998.
- Initiating UpCSERG 1998.
- I am the cashier for the organization Föreningen För Datateknisk Forskning (FFDF) since 1992.
- Librarian at the Department of Computer Systems (DoCS) 1987 1998.
- I was a member of the People to People Computers in Education Delegation to People's Republic of China May 1987.
- Co-founder and co-director of Tau Datorsystem i Uppsala, HB together with Hans Hanson 1987-present.

Language Skills

- Swedish native.
- English fluent.
- German intermediate.
- French limited.

References

Can be provided on request.

Publications

Doctoral thesis

Daniels, M. (2011) Developing and Assessing Professional Competencies: a Pipe Dream? Experiences from an Open-Ended Group Project Learning Environment, *Digital Comprehensive Summaries of Uppsala Dissertations from the Faculty of Science and Technology, nr 808*, Acta Universitatis Upsaliensis, Uppsala.

Journal papers (with peer reviewing)

Isomöttönen, V., Daniels, M., McDermott, R., Pears, A., and Cajander, Å. (2017), Searching for Employability: A Qualitative Inquiry into Students' Responses to an Enabling Learning Environment, abstract accepted for Global Software Engineering Education Special Issue of the ACM *Journal Transactions on Computing Education*.

Frezza, S., Daniels, M., and Wilkin, A. (2017), Assessing Global IT Professional Values, abstract accepted for Global Software Engineering Education Special Issue of the ACM Journal Transactions on Computing Education.

Beecham, S., Clear, T., Barr, J., Daniels, M., Oudshoorn, M., and Noll, J. (2017), Preparing Tomorrow's Software Engineers for Work in a Global Environment, *IEEE Software*, January/February, pp 9-12.

Huvila, I., Cajander, Å., Åhlfeldt, R. M., & Daniels, M. (2016). "Patients reading their medical records: Experiences and attitudes: Differences between first-time and recurrent readers", *Information research*, vol 21(1).

Huvila, I., Cajander, Å., Daniels, M., and Åhlfeldt, R. M. (2015). "Patients' perceptions of their medical records from different subject positions", *Journal of the Association for Information Science and Technology*, vol 66(12), pp 2456-2470.

Lárusdóttir, M., Daniels, M., and McDermott, R. (2015) "Quality Assurance using International Curricula and Employer Feedback", *Australian Computer Science Communications*, vol 160, pp 19-27.

Daniels, M., Cajander, Å., Clear, T., and McDermott, R. (2015) "Collaborative Technologies in Global Engineering: New Competencies and Challenges", *International Journal of Engineering Education*, vol 31, no 1, pp 1-15.

Cajander, Å., Daniels, M., and McDermott, R. (2012) "On Valuing Peers – Theories of Learning and Intercultural Competence", *Computer Science Education*, vol 22, pp 319-342.

Daniels, M. and Pears, A. (2012) "Models and Methods for Computing Education Research", *Australian Computer Science Communications*, vol 34, no 2, pp 95-102.

Bernáld, H., Cajander, Å., Daniels, M., and Laxer, C. (2011) "Reasoning About the Value of Cultural Awareness in International Collaboration", *Journal of Applied Computing and Information Technology*, vol 15, no 1.

Cajander, Å., Daniels, M., McDermott, R and von Konsky, B (2011). "Assessing Professional Skills in Engineering Education", *Australian Computer Science Communications*, vol 33, no 2, pp 145-154.

Wiggberg, M. and Daniels, M. (2011). "A Method for Analysing Learning Outcomes in Project Courses", *Australian Computer Science Communications*, vol 33, no 2, pp 73-78.

Daniels, M. (2010) "The Contribution of Open Ended Group Projects to International Student Collaborations", *ACM Inroads*, vol 1, no 3, pp 79-84.

Daniels, M., Cajander, Å., Clear, T., and Pears, A. (2010) "Engineering Education Research in Practice: Evolving Use of Open Ended Group Projects as a Pedagogical Strategy for Developing Skills in Global Collaboration", *International Journal of Engineering Education*, vol 26, no 4, pp 795-806.

Daniels, M. and Cajander, Å. (2010) "Constructive Controversy as a way to create "true collaboration" in an Open Ended Group Project Setting", *Australian Computer Science Communications*, vol 32, no 2, pp 73-78.

Laxer, C., Daniels, M., Cajander, Å., and Wollowski, M. (2009) "Evolution of an International Collaborative Student Project", *Australian Computer Science Communications*, vol 31, no 5, pp 111-118.

Hauer, A. and Daniels, M. (2008) "A Learning Theory Perspective on Running Open Ended Group Projects (OEGPs)", *Australian Computer Science Communications*, vol 30, no 5, pp 85-92.

Berglund, A., Daniels, M., and Pears, A. (2006) "Qualitative Research Projects in Computing Education Research: An Overview", *Australian Computer Science Communications*, vol 28, no 5, pp 25-34.

Daniels, M., Berglund, A., Pears, A. and Fincher, S. (2004) "Five myths of assessment", *Australian Computer Science Communications*, vol 26, no 5, pp 57-61.

Alexander, S., Amillo, J., Boyle, R., Clark, M., Daniels, M., Laxer, C., and Loose, K. (2003) "Case Studies in Admission to and Early Performance in Computer Science Degrees", *ACM SIGCSE Bulletin*, vol 35, no 4, pp 137-147.

Pears, A. and Daniels, M. (2003) "Structuring CSEd Research Studies: Connecting the Pieces", ACM SIGCSE Bulletin, vol 35, no 3, pp 149-153.

Adams, L., Daniels, M., Goold, A., Hazzan, O., Lynch, K., and Newman, I. (2003) "Challenges in teaching capstone courses", *ACM SIGCSE Bulletin*, vol 35, no 3, pp 219-220.

Newman, I., Daniels, M., and Faulkner, X. (2003) "Open Ended Group Projects a 'Tool' for More Effective Teaching", *Australian Computer Science Communications*, vol 25, no 5, pp 95-103.

Last, M., Daniels, M., Hause, M., and Woodroffe, M. (2002) "Learning from Students: Continous Improvement in International Collaboration", *ACM SIGCSE Bulletin*, vol 34, no 3, pp 136-140.

Clear, T. and Daniels, M. (2001) "A Cyber-Icebreaker For An Effective Virtual Group?", ACM SIGCSE Bulletin, vol 33, no 3, pp 121-124.

Last, M., Almstrum, V., Daniels, M., Erickson, C., and Klein, B. (2000) "An International Student/Faculty Collaboration: The Runestone Project", *ACM SIGCSE Bulletin*, vol 32, no 3, pp 128-131.

Klein, B., Berglund, A., Clear, T., Daniels, M., Goold, A., Hagan, D., Last, M., and Sutinen, E. (2000) "Teaching Inter-institutional courses – Sharing challenges and resources", *ACM SIGCSE Bulletin*, vol 32, no 3, pp 178-179.

Daniels, M., Berglund, A., and Petre, M. (1999) "Reflections on International Projects in the Undergraduate CS Education", *Computer Science Education*, vol 9, no 3, pp 256-267.

Berglund, A., Daniels, M., Hedenborg, M., and Tengstand, A. (1998) "Assessment to Increase Students' Creativity: Two Case Studies", *European Journal of Engineering Education*, vol 23, no 1, pp 45-54.

Berglund, A. and Daniels, M. (1997) "Improving Education Quality, a full scale study", *ACM SIGCSE Bulletin*, vol 29, no 1, pp 330-334.

Daniels, M., Gal-Ezer, J., Sanders, I., and Teague, J. (1996) "Teaching computer science: Experiences from four continents", ACM SIGCSE Bulletin, vol 28, no 1, pp 102-106.

Berglund, A., Daniels, M., Davies, J., Fenz, E., and Zadeh, J. (1996) "Computer Science Education in Europe", *ACM SIGCSE Bulletin*, vol 28, no 1, pp 395-396.

Conference papers (with peer reviewing)

Grande, V., Berglund, A., and Daniels, M. (2017) *Experiences of Teachers in Computing as Role Models: a Phenomenographic Study*, Koli Calling, Koli, Finland.

Cajander, Å., Daniels, M., Golay, D., McDermott, R., Moll, J., Nylén, A., Pears, A., and Peters, A. (2017) *Student Behaviour and Learning Opportunities – Using Critical Incident Analysis and a Model for Understanding Students' Behaviour*, ASEE/IEEE Frontiers in Education, Indianapolis, USA.

Grande, V. and Daniels, M. (2017) A Gender Lens on the Last Decade of FIE: Role Models for the Community, ASEE/IEEE Frontiers in Education, Indianapolis, USA.

McDermott, R., Daniels, M., Zarb, M., Pears, A., Nylén, A., and Isomöttönen, V. (2017) *The Authenticity of "Authentic" Assessment – Some Faculty Perceptions*, ASEE/IEEE Frontiers in Education, Indianapolis, USA.

Nylén, A., Cajander, Å., Daniels, M., Pears, A., and McDermott, R. (2017) Why are we here? Student Perspectives on the Goal of STEM Higher Education, ASEE/IEEE Frontiers in Education, Indianapolis, USA.

Nylén, A., Daniels, M., and Isomöttönen, V. (2017) *Open-Ended Projects Opened Up – Aspects of Openness*, ASEE/IEEE Frontiers in Education, Indianapolis, USA.

Pears, A, Daniels, M., and Cajander, Å. (2017) *The Archetype Learning Method – Scaffolding Teamwork Competences in the Engineering Classroom*, ASEE/IEEE Frontiers in Education, Indianapolis, USA.

Vo, H-P., Berglund, A, and Daniels, M. (2017) A Perspective from Vietnamese Students on Teaching Soft Skills, Learning and Teaching in Computing and Engineering, LaTiCE, Hong Kong, China.

McDermott, R., Zarb, M., Daniels, M., and Isomöttönen, V. (2017) First Year Computing Students' Perceptions of Authencity in Assessment, ACM Innovation and Technology in Computer Science Education, Bologna, Italy.

Clear, T., Daniels, M., Cajander, Å., Parsjö, E., Lagerqvist, N., and McDermott, R. (2016) *A Framework for Writing Personal Learning Agreements*, ASEE/IEEE Frontiers in Education, Eire, USA.

- Jónsson, B., Lárusdóttir, M., Daniels, M., Clear, A., Clear, T., and McDermott, R. (2016) *Aligning Quality Assurance at the Course Unit and Educational Program Levels*, ASEE/IEEE Frontiers in Education, Eire, USA.
- Lind, T., Cajander, Å., Sandblad, B., Lárusdóttir, M., Daniels, M., McDermott, R., and Clear, T. (2016) *Students Envisioning the Future*, ASEE/IEEE Frontiers in Education, Eire, USA.
- Pears, A., Nylén, A., and Daniels, M. (2016) A Critical Analysis of Trends in Student-centric Engineering Education and their Implications for Learning, ASEE/IEEE Frontiers in Education, Eire, USA.
- McDermott, R., Zarb, M., Daniels, M., Cajander, Å., and Clear, T. (2016) *Motivation, Optimal Experience and Flow in First Year Computing Science*, ACM Innovation and Technology in Computer Science Education, Arequipa, Peru.
- McDermott, R., Daniels, M., Cajander, Å., Bass, J., and Lalchandani, J. (2015) *Comparative Analysis of Two Globally Distributed Group Projects: A Perspective from CSCW/CSCL Research*, ASEE/IEEE Frontiers in Education, El Paso, USA.
- Clear, T., Beecham, S., Barr, J., Daniels, M., Mcdermott, R., Oudshoorn, M., Savickaite, A., and Noll, J., (2015) *Challenges and Recommendations for the Design and Conduct of Global Software Engineering Courses: A Systematic Revie*, In Proceedings of the Working Group Reports of the 2015 on Innovation and Technology in Computer Science Education Conference, N. Ragonis and P. Kinnunen Eds. ACM, New York, USA.
- Daniels, M., Cajander, Å., Clear, T., Eckerdal, A., Lind, M., McDermott, R., and Nylén, A. (2015) *Competencies for Paradigm Shift Survival*, ASEE/IEEE Frontiers in Education, El Paso, USA.
- Peters, A-K., Waqar Hussain, W., Cajander, Å., Clear, T., and Daniels, M. (2015) *Preparing the Global Software Engineer*, IEEE International Conference on Global Software Engineering, Ciudad Real, Spain.
- Cajander, Å., Daniels, M., Peters A-K., and McDermott, R. (2014) *Critical Thinking, Peer-Writing, and the Importance of Feedback*, ASEE/IEEE Frontiers in Education, Madrid, Spain.
- McDermott, R., Daniels, M., and Lárusdóttir, M. (2014) Subject-Level Quality Assurance in Computing Experiences From Three National Perspectives, ASEE/IEEE Frontiers in Education, Madrid, Spain.
- McDermott, R., Cajander, Å., and Daniels, M. (2014) *Perseverance measures and attainment in first year computing science students*, ACM Innovation and Technology in Computer Science Education, Uppsala, Sweden.
- Pears, A., Daniels, M., and Cajander, Å. (2014) *Integrating Global Systems Development Skills into the Engineering Curriculum*, ASEE International Forum, Indianapolis, USA.
- McDermott, R., Pirie, I., Cajander, Å., Daniels, M., and Laxer, C. (2013) *Contemplations on Results from Investigating the Personal Epistemology of Computing Students*, ASEE/IEEE Frontiers in Education, Oklahoma City, USA.
- Daniels, M., Cajander, Å., and McDermott, R. (2013) Using Open-Ended Group Projects in HCI Courses, IFIP workshop Challenges from the Future: Bridging the Gaps Through HCI Education, Cape Town, South Africa.
- McDermott, R., Pirie, I., Cajander, Å., Daniels, M., and Laxer, C. (2013) *Investigation into the Personal Epistemology of Computer Science Students*, ACM Innovation and Technology in Computer Science Education, Canterbury, UK.
- Huvila, I., Daniels, M., Cajander, Å., and Åhlfeldt, R-M. (2013) Experiences and Attitudes of Patients Reading their Medical Records: Differences between Readers and Recurrent Readers, Onformation: Interactions and Impact, Aberdeen, UK.
- McDermott, R., Daniels, M., Cajander, Å., Clear, T., Cullhed, M., and Laxer, C. (2012) *Student Reflections on Collaborative Technology in a Globally Distributed Student Project*, ASEE/IEEE Frontiers in Education, Seattle, USA
- Cajander, Å., Daniels, M., Kultur, C., Russell, L., and Laxer, C. (2012) *Managing International Student Collaborations: An Experience Report*, ASEE/IEEE Frontiers in Education, Seattle, USA.
- Cajander, Å., Clear, T., Daniels, M., McDermott, R. Cullhed, M., and Laxer, C. (2012) *Categorizing How Students Use Collaborative Technology in a Globally Distributed Project*, ASEE/IEEE Frontiers in Education, Seattle, USA.
- Bernáld, H., Cajander, Å., Daniels, M., Kultur, C., Löfström, A., McDermott, R., and Russell, L. (2012) *Intercultural Competence in Global Collaboration Courses in Computer Engineering*, Applied Human Factors and Ergonomics, San Francisco, USA.

Cajander, Å., Daniels, M., Bernáld, H., and Victor, B. (2012) *Progression av professionella kompetenser – utmaningar och erfarenheter*, konferens i universitetspedagogisk utveckling, Uppsala, Sweden.

Cajander, Å., Daniels, M., Bernáld, H., and Victor, B. (2011) *Professionella kompetenser i projektkurser*, 3:e Utvecklingskonferensen för Sveriges ingenjörsutbildningar.

Cajander, Å., Daniels, M., and von Konsky, B. (2011) *Development of Professional Competencies in Engineering Education*, ASEE/IEEE Frontiers in Education conference, Rapid Springs, USA.

Daniels, M. and Cajander, Å. (2010) Experiences from using Constructive Controversy in an Open Ended Group Project, ASEE/IEEE Frontiers in Education conference, Washington D.C., USA, pp S3D 1-5.

Hauer, A. and Daniels, M. (2010) *Use and analysis of student response systems in two summer courses*, Att undervisa med vetenskaplig förankring – I praktiken!, ed. Johansson, Uppsala University, Sweden, pp 115-128.

Pears, A. and Daniels, M. (2010) Developing Global Teamwork Skills: The Runestone Project, IEEE EDUCON, Madrid, Spain.

Berglund, A., Daniels, M., Eckerdal, A., Pears, A., and Thuné, M. (2010) Ämnesdidaktisk forskning, undervisning och pedagogisk utveckling i samverkan – exemplet datavetenskapens didaktik vid Uppsala universitet, NU2010, Stockholm, p 108.

Wiggberg, M. and Daniels, M. (2010) *Projektkurser som pedagogisk modell: Når vi dit vi vill?*, NU2010, Stockholm, p 190.

Cajander, Å., Clear, T., Daniels, M., Edlund, J., Hamrin, P., Laxer, C., and Persson, M. (2009) *Students analyzing their collaboration in an International Open Ended Group Project*, ASEE/IEEE Frontiers in Education conference, San Antonio, USA, pp M1D 1-6.

Cajander, Å., Clear, T. and Daniels, M. (2009) *Introducing an External Mentor in an International Open Ended Group Project*. ASEE/IEEE Frontiers in Education Conference, San Antonio, USA, pp T1A 1-6.

Berglund, A., Daniels, M., and Pears, A. (2009) *Utbildningskvalitet och rättsäkerhet – ett motsatspar?*, 2:a utvecklingskonferensen för Sveriges ingenjörsutbildningar, Lund, Sweden, pp 115-117.

Berglund, A., Gottlieb, M., Daniels, M., Glenstrup, A. J., Pears, A., and Paulin Hansen, J. (2008) *Three Ways of Globalizing IT Engineering Education: Experiences from Two European Universities*, International Conference on Science, Technology and Education Policy, Hangzhou, China.

Pears, A., Fincher, S., Adams, R., and Daniels, M. (2008) *Stepping Stones: Capacity building in engineering education*, ASEE/IEEE Frontiers in Education conference, Saratoga, USA, pp 307-312.

Wiggberg, M. and Daniels, M. (2008) *Reflecting on running large scale student collaboration projects*, ASEE/IEEE Frontiers in Education conference, Saratoga, USA, pp 1464-1468.

Daniels, M. and Pears, A. (2008) *Stepping Stones: Capacity Building in Engineering Education?*, 1:a utvecklingskonferensen för Sveriges ingenjörsutbildningar, Stockholm, Sweden.

Daniels, M. and Pendrill, A-M. (2008) Är anonyma tentamina objektiva och rättvisa?, NU2008, Kalmar, Sweden, pp 283-287.

Daniels, M. (2007) CeTUSS (Centrum för Teknikutbildning i Studenternas Sammanhang) A national center for pedagogical development in technology education from a student oriented perspective, ReflekTori, Helsinki, Finland

Pears, A. and Daniels, M. (2007) CeTUSS (Centrum för Teknikutbildning i Studenternas Sammanhang): A national center for pedagogical development in technology education, IEEE Meeting the Growing Demand for Engineers and Their Educators 2010-2020, Munich, Germany.

Daniels, M. and Hauer, A (2007) *Balancing Scaffolding and Complexity in Open Ended Group Projects (OEGPs):* A Learning Theory View, ASEE/IEEE Frontiers in Education conference, Milwaukee, USA, F2G 1-2.

Daniels, M., Carbone, A, Hauer, A., and Moore, D. (2007) *Ill-structured Problem Solving in Engineering Education*, ASEE/IEEE Frontiers in Education conference, Milwaukee, USA, pp F3F 1-2.

Hauer, A. and Daniels, M. (2006) *Computing in a business context: a way to motivate and prepare*, SEFI 34th Annual Conference, Uppsala, Sweden, pp 47-52.

Daniels, M., Barker, L., Cajander, Å., Laxer, C., and Moore, D. (2005) *Managing cross-cultural differences in an Open Ended Group Project course*, ASEE/EEE Frontiers in Education conference, Indiana, USA, pp T4D 22-23.

Daniels, M., Faulkner, X., and Newman, I. (2005) *Widening the horizon using the OEIGP*, HCI International conference, Las Vegas, USA.

Daniels, M., Berglund, A., and Pears, A. (2003) *Runestone, The Story*, Grundutbildningsrådets utvecklingskonferens, Gävle, Sweden, pp 170-177.

Daniels, M., Faulkner, X., and Newman, I. (2003) *MEAD, Managing Education with Teachers at a Distance*, ASEE/IEEE Frontiers in Education conference, Boulder, USA, pp S1F 26-29.

Clear, T., and Daniels, M. (2003) 2D and 3D Introductory Processes in Virtual Groups, ASEE/IEEE Frontiers in Education conference, Boulder, USA, S1F 1-6.

Daniels, M. (2002) *Distributed Teaching with Local Control*, ASEE/IEEE Frontiers in Education conference, Boston, USA, pp T4E 1-2.

Daniels, M., Faulkner, X., and Newman, I. (2002) *Open Ended Group Projects, Motivating Students and Preparing them for the "Real World"*, IEEE Conference on Software Engineering Education & Training, Covington, USA.

Pears, A., Daniels, M., and Berglund, A. (2002) *Describing Computer Science Education Research: An Academic Process View*, SCS Western Multiconference, San Antonio, USA, pp 99-104.

Daniels, M., Asplund, L., Berglund, A., Flack, H., and Pears, A. (2001) What is a successful project?, Kvalitetskonferensen, Norrköping, Sweden.

Pears, A., Daniels, M., Berglund, A., and Erickson, C. (2001) Student Evaluation in an International Collaborative Project Course, SAINT, San Diego, USA.

Sandström, A. and Daniels M. (2000) *Time Studies as a Tool for (Computer Science) Education Research*, Australasian Computing Education conference, Melbourne, Australia.

Daniels, M. and Asplund, L. (2000) *Multi-Level Project Work; a Study in Collaboration*, ASEE/IEEE Frontiers in Education conference, Kansas City, USA, pp F4C 11-13.

Daniels, M., Jansson, A., Kavathatzopoulos, I, and Petre, M. (2000) *Using a Real-Life Setting to Combine Social and Technical Skills*, ASEE/IEEE Frontiers in Education conference, Kansas City, USA, pp F4C 6-9.

Berglund A. and Daniels. M. (2000) *How do individual portable computers effect student learning?*, ASEE/IEEE Frontiers in Education conference, Kansas City, USA, pp S3D 7-10.

Clear, T. and Daniels. M. (2000) *Using Groupware for International Collaborative Learning*, ASEE/IEEE Frontiers in Education conference, Kansas City, USA, F1C 18-23.

Daniels, M. and Petre, M. (2000) IT in Society: a multi-disciplinary course, Kvalitetskonferensen, Eskilstuna, Sweden.

Daniels, M. and Asplund, L. (1999) *Full Scale Industrial Project Work*, ASEE/EEE Frontiers in Education conference, San Juan, Costa Rica, pp 11b2 7-9.

Daniels, M. and Petre, M. (1999) *IT in Society: a Multi-Disciplinary Course*, ASEE/IEEE Frontiers in Education conference, San Juan, Costa Rica, pp 13a1 21.

Daniels, M., Berglund, A., and Petre, M. (1999) *Some thoughts on international projects in the undergraduate education*, EPCoS workshop, Exeter, UK.

Daniels, M. and Fincher, S. (1999) Evaluating a joint international project in disjunct courses, SEFI workshop, Delft, Holland.

Daniels, M., Petre, M., Almstrum, V., Asplund, L., Björkman, C., Erickson, C., Klein, B., and Last, M. (1998) *RUNESTONE, an International Student Collaboration Project*. ASEE/IEEE Frontiers in Education conference, Tempe, USA.

Daniels, M., Petre, M., and Berglund, A. (1998) *Building a Rigorous Research Agenda into Changes to Teaching*. Australasian Computer Science Education conference, Brisbane, Australia, pp 203-209.

Daniels, M. (1998) *Utbildningsprogrammens kvalitet: Mål och strategier för att uppnå dessa*, Kvalitetskonferensen, Luleå, Sweden.

Berglund, A., Daniels, M., and Almstrum, V. (1997) *A Smorgasbord of Pedagogical Dishes*. Australasian Computer Science Education conference, Melbourne, Australia.

Teague, J., Daniels, M., Davies, G., Gal-Ezer, J., and Petre, M. (1997) *Teaching Computing at a Distance*, ASEE/IEEE Frontiers in Education conference, Pittsburgh, USA.

Berglund, A., Daniels, M., Lundqvist, K., and Westlund, E. (1996) *Encouraging Active Participation in Programming Classes, National Conference on College Teaching and Learning*, Jacksonville, USA.

Daniels, M., Gal-Ezer, J., Sanders, I., and Teague, J. (1996) *Teaching computer science: Experiences from four continents*, ACM SIGCSE Technical symposium in Philadelphia, USA.

Wang, Y., Pettersson, P. and Daniels, M. (1994) *Automatic Verification of Real-Time Communicating Systems By Constraint-Solving*, International Conference on Formal Description Techniques, Bern, Switzerland.

Daniels, M. (1992) *Modelling Real-Time behavior with an Interval Time Calculus*, symposium on Formal Techniques in Real-Time and Fault-Tolerant Systems, Nijmegen, Holland.

Daniels, M. (1991) Extending CCS with Time Intervals, Nordic Workshop on Program Correctness, Göteborg, Sweden.

Daniels, M. and Dillon, T. (1990) Representing Real-Time, Nordic Workshop on Program Correctness, Aalborg, Denmark.

Daniels, M. and Dillon, T. (1990) *The notion of time in distributed systems*, Australian Software Engineering Conference, Sydney, Australia.

Daniels, M. (1988) Description of Distributed Systems, Australian Computer Science Conference, Brisbane, Australia.

Daniels, M. (1987) *Design criterias and Formal Description Techniques*, IFIP international conference on Computer hardware description languages and their applications, Amsterdam, Holland.

Daniels, M. and Hansson, H. (1985) *Asyl/EFSM, a formal specification language, and its environment*, IFIP international conference on Computer hardware description languages and their applications, Tokyo, Japan.

Ahtiainen, A., Alfonzetti, S., Chari, V., Daniels, M., Diaz, M., Faro, A., Hansson, H., Juanole, G., Karjalainen, U., LeMoli, G., Malka, J., Palazzo, S., and Pereda, O. (COST-11-bis group on FDT/AEFSD) (1985) *An approach for evaluating formal description techniques*, IFIP Workshop on Protocol Specification, Testing and Verification, Moissac, France.

Daniels, M. and Hansson, H. (1984) Asyl/EFSM, a protocol specification language, Networks India-84, Madras, India.

Daniels, M. and Hansson, H. (1984) *An Asyl/EFSM description of the ISO Transport Protocol*, IFIP Workshop on Protocol Specification, Testing and Verification, Skytop, USA.

Pehrson, B., Christoff, I., Daniels, M., and Hansson, H. (1983) *Caddie, an interactive design system for specification validation and implementation of protocols*, DFN Workshop: Specification techniques in the DFN, Darmstadt, Germany.

Book chapter

Daniels, M. (2015) Datorteknik, Från informationsbehandling till informationsteknologi – Institutionen för informationsteknologi söker sina rötter, ed. Sjöberg, A., Lundell, L. and Thuné, M., Uppsala University, pp 67 – 76.

Cajander, Å. and Daniels, M (2010) Internationella studentprojekt – en ämnesdidaktisk utmaning, *Kunskapens nya världar - Mötet mellan pedagogik och teknik vid Uppsala Learning Lab*, ed. Lee, J., Uppsala University, pp 255-269.

Faulkner, X., Daniels, M., and Newman, I. (2006) Open Ended Group Projects (OEGP): A Way of Including Diversity in the IT Curriculum, Chapter IX, *Diversity in Information Technology Education: Issues and Controversies*, ed. Trajkovski, Information Science Publishing, London, UK, pp 166-195.

Daniels, M. (2003) Projekt nära användarna, *Hållbarhetshandboken*, ed. Wallin, P., Lundh, A, and Ekman, P., Rådet för högre utbildning, Sweden, pp 23-28.

Other publications

Licentiate thesis

Daniels, M. (1985) Asyl/EFSM a language for specification of protocols and computers, *DoCS No 2*, Uppsala, Sweden.

Master of Science thesis

Daniels, M. and Lissdaniels, T. (1980) "ROS-8086" en grund för ett realtidsoperativsystem på ISBC 86/12, *Uptec 80133 E*, Uppsala, Sweden.

Educational research

Daniels, M. (1999) Runestone, an International Student Collaboration Project, NyIng report No 11, Linköping, Sweden.

Formal methods

Daniels, M. (1991) CCS with Interval Time, DoCS No 32, Uppsala, Sweden.

Daniels, M. (1985) CHDLs in general and Asyl/EFSM in particular, DoCS No 1, Uppsala, Sweden.

Daniels, M. and Hansson, H. (1984) The Asyl/EFSM language, including a trial specification of the ISO Transport protocol and service, *Uptec 8444 R*, Uppsala, Sweden.

Daniels, M. (1982) Cambridge ring: an ISPS description, Uptec 8289 R, Uppsala, Sweden.

Course material

Daniels, M., Hansson, H, and Packalén, S. (1985) *Mätning och Styrning* (Häfte 14 i LiberHermods, Utbildningsradions och Universitetens kurs i Datakunskap), LiberHermods, Malmö, Sweden, ISBN 91-23-92898-0.

Datorer och kommunikation (1985) (TV program i LiberHermods, Utbildningsradions och Universitetens kurs i Datakunskap), Producent: Per Lindahl (UR), Stockholm, Sweden.

Produktion med datorer (1985) (TV program i LiberHermods, Utbildningsradions och Universitetens kurs i Datakunskap), Producent: Per Lindahl (UR), Stockholm, Sweden.

Miscellaneous

Daniels, M (2017) Interview with SIGCSE 2017 Award recipient Mats Daniels, ACM SIGCSE Bulletin, Vol 49, no 2.

Daniels, M. and Pendrill, A-M. (2008) Är anonyma tentor objektiva och rättvisa?, *Universitetsläraren*, SULF, no. 7, Sweden.

Daniels, M. and Hansson, H. (1983) Datateknik, politik och samhälle, *Uptec 8366 K*, Uppsala, Sweden.

Panels

Clear, T., Beecham, S., Barr, J., Daniels, M., Oudshoom, M., and Noll, J. (2016) *Developments in Global Software Engineering Education*, ASEE/IEEE Frontiers in Education, Eire, USA.

Daniels, M., Dror, I., and Veen, W. (2009) *Opening Panel: Shaping the Future of the Web: Opportunities and Challenges*, Conference on Computer Supported Education, Lisbon, Portugal.

Daniels, M., Fensel, D., and Munson, E. (2009) *Opening Panel: Shaping the Future of the Web: Opportunities and Challenges*, Conference on WEB Information Systems and Technologies, Lisbon, Portugal.

Daniels, M., Carbone, A, Hauer, A., and Moore, D. (2007) *Ill-structured Problem Solving in Engineering Education*, IEEE Frontiers in Education conference, Milwaukee, USA.

Daniels, M., Carbone, A., Clear, T., and de Raadt, M. (2007) *Ill-structured problem solving: Invited panel*, Australasian Computer Education conference, Ballarat, Australia.

Adams, L., Daniels, M., Goold, A., Hazzan, O., Lynch, K., and Newman, I. (2003) *Challenges in teaching capstone courses*, ACM ITiCSE, Thessaloniki, Greece.

Klein, B., Berglund, A., Clear, T., Daniels, M., Goold, A., Hagan, D., Last, M., and Sutinen, E. (2000) *Teaching Inter-institutional courses – Sharing challenges and resources*, ACM SIGCSE Symposium, Austin, USA.

Teague, J., Daniels, M., Davies, G., Gal-Ezer, J., and Petre, M. (1997) *Teaching Computing at a Distance*, ASEE/IEEE Frontiers in Education conference, Pittsburgh, USA.

Berglund, A., Daniels, M., Davies, J., Fenz, E., and Zadeh, J. (1996) *Computer Science Education in Europe*, ACM SIGCSE Symposium, Philadelphia, USA.