

Curriculum Vitae for Sverker Holmgren

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Born January 2 1963. Married, six children.

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Degrees

Research Professor in Scientific Computing, Chalmers University of Technology, 2022

Professor in Scientific Computing, Uppsala University, 2010.

Docent (Associate Professor) in Numerical Analysis, Uppsala University, 1999.

Ph.D. in Numerical Analysis, Department of Scientific Computing, Uppsala University, 1993.

M.Sc. in Engineering Physics (Civ.Ing. Teknisk Fysik), specialization in Scientific Computing, Uppsala University, 1987.

Employments

2022- Research Professor in Scientific Computing, Chalmers University of Technology

May 2020- Director of Chalmers e-Infrastructure Commons at Chalmers University of Technology

2010-2022 Professor in Scientific Computing at Uppsala University

2011-2019 Program Director for the Nordic e-Science Globalisation Initiative, NordForsk, Oslo (part-time)

1993-2010 Senior Lecturer (“Universitetslektor”) in Scientific Computing, Uppsala University

1987-1993 PhD student

Current Assignments

At Chalmers University of Technology

Recruited in 2020 by Chalmers University of Technology as the **Director of Chalmers e-Infrastructure Commons**. Chalmers e-Commons is a novel digital research infrastructure, implementing and/or providing access to the full spectrum of services needed by Chalmers researchers using a data-centric approach. E-Commons is also the local interface towards national and international e-infrastructure and data initiatives, e.g. EOSC. Appointed by Chalmers as the **Chalmers Delegate to the EOSC AISBL Council**. **Chalmers representative in the European university network CESAER’s Task Force on Open Science and technology**. Member of Chalmers Digitalization Council. Member of Chalmers Security Committee. Member of Chalmers Task Force on Open Science.

National

Member of the Board of the Swedish National Data Service (SND). SND is a national research infrastructure for sharing research data. Appointed by the Swedish Research Council as a **member of the research council Reference Group for Research Data Management and the European Open Science Cloud (EOSC)** in 2019. Appointed by the Swedish Association of Higher Educational Institutions (SUHF, the Swedish “Rectors’ Conference”) as **member of the SUHF Working Group for Research Data**, which has a mandate to produce and follow-up on an **SUHF Open Science Roadmap**. Member of the Steering Group of Gothenburg University’s Research Data Initiative.

International

Appointed by the Swedish Ministry of Education and Research as the **Swedish representative in the European e-Infrastructure Reflection Group (e-IRG)** 2008-2024 (several re-appointments). e-IRG defines and recommends best practices for the pan-European e-infrastructure efforts. The work has included the coining the notion of the *European e-Infrastructure Commons* which can be seen as the e-infrastructure basis for EOSC. Appointed by the e-IRG Forum as a **member of the e-IRG Executive Board** in 2018 and re-elected in 2021.

Member of the ESFRI Implementation Group (IG) since January 2017. The ESFRI IG reviews implementation aspects of all new ESFRI proposals and ESFRI initiatives aiming at Landmark status.

Earlier Assignments

At Uppsala University

July 2011- June 2017: **Dean of Mathematics and Computer Science.**

Leader of the UU project to establish the UU Research Data Office February 2019 – May 2020.

UU representative in the European university network The Guild's Working Group on Open Science 2018 – 2020. **Member of the UU Council for Research Infrastructure** 2017 – 2020.

January 2009 – August 2011: **Coordinator** (jointly with K. Hermansson) **for the Strategic Research Area (SFO) Consortium eSSENCE. Director of eSSENCE** May 2017 – May 2020. July 2006 – June 2011: **Head of Research for the Department of Information Technology.**

January 2003 – June 2006: **Director for the Uppsala Multidisciplinary Center for Advanced Computational Science (UPPMAX).** August 2017 – December 2018: **Member of the Steering Group for UU work on the General Data Protection Regulation.** December 2016 – June 2018: **Member of the Steering Group for an UU initiative providing storage resources for research data.** 2017: Appointed by the Disciplinary domain of science and technology to **analyse the needs of research infrastructure and data management** within the Domain.

National

July 2006 – May 2012: **Director for the Swedish National Infrastructure for Computing (SNIC).** 2007-2012: **Member of Board of the Swedish National Data Service (SND).** 2016: Appointed by UU and the University Reference Group for Research Infrastructure (URFI) as **chair of the expert group providing a proposal for SNIC 2.0.** 2018: Appointed by the Swedish Research Council and URFI as a **member of the expert group providing recommendations on the future Swedish e-infrastructure for research.**

2007 – 2012: **Deputy Chairman for the Swedish Research Council evaluation panel for Mathematics and Technical Mathematics (NT-R).** **Member of NT-R** in 2004. 2013 – 2019: **Member of the Program Committee for the Applied Mathematics Program at the Swedish Foundation for Strategic Research (SSF).** 2018 – 2019: **Member of the evaluation panel for the Future Research Leader Program FFL1-FFL4 at SSF.**

2023: **Special investigator for Malmö University,** providing a proposal for an integrated digital research infrastructure at the university.

At NordForsk/Nordic Council of Ministers

NordForsk in an agency under the Nordic Council of Ministers that funds and facilitates Nordic research cooperation and research infrastructure

2008-2010: **Represented the Swedish Research Council in the NORIA-net group The Nordic eScience Initiative (eNORIA).** e-NORIA produced the original version of the Nordic eScience Action Plan. 2014: Appointed by the Nordic Council of Ministers to lead the work on producing an **updated version of the Nordic eScience Action Plan,** submitted in January 2015. 2015: Appointed by the Nordic Council of Ministers to produce a **report on Open Access to Research Data,** delivered in 2016. 2011 – 2019: **Program Director for the Nordic eScience Globalisation Initiative** at Nordforsk. 2017 – 2019: Appointed as the coordinator of NordForks **Strategic Initiative on Research Infrastructure,** including coordination of a Nordic group of leaders of research infrastructure funding agencies. 2017-2019: **Coordinating NordForks policy-oriented work on Open Science.**

International

Chairman of the board for the Nordic Data Grid Facility (NDGF) during 2009. Deputy Chairman during 2008. Member of the board 2008-2011. 2007 - August 2012: **Swedish representative in the European Grid Initiative (EGI) Council.** 2010 – August 2012: **Member of the EGI.eu EB.** 2010 – August 2012: **Member of the EGI-InSPIRE CB.** 2007 – 2010: **Member of the E-Science (EGEE) Collaboration Board.** 2007 – August 2012: **Member of the Partnership for Advanced Computing**

in Europe (PRACE) Council. 2011 – August 2012: Member of the European Data Infrastructure (EUDAT) Council. Appointed by the Swedish Research Council as **Swedish representative in the PRACE, EUDAT and EGI Councils** (for SNIC) during 2017. 2014 -2017: **Member of the Horizon 2020 Advisory Group on European Research Infrastructures including eInfrastructures.**

2013-2016: Appointed by the e-IRG plenum as **Chair of e-IRG.** 2016: **Chair of the European Strategy Forum for Research Infrastructures (ESFRI) Working Group on Coordination of Investments in e-Infrastructures.** Appointed by the Swedish Delegation to the ESFRI Forum as **Permanent Expert in the Swedish Delegation in European Strategy Forum for Research Infrastructures (ESFRI),** regularly taking part in ESFRI activities including ESFRI Forum meetings since 2013-2021.

2009: **Member of the Norwegian Research Council evaluation panel on mathematics/computational science** in 2009 and **on e-Science (EVITA)** in 2010. 2017: Member of the **Academy of Finland's international review panel for mid-term review of national and international research infrastructures.** Appointed by the Deutsche Forschungsgemeinschaft (DFG) as a **member of 2019 and 2020 international review panels for National (German) Research Data Infrastructures.** 2019: **Chair of an international panel evaluating the Norwegian national e-infrastructure SIGMA 2.** 2020, 2022 and 2023: Member of the **Academy of Finland's international review panel for research infrastructures as collaborative platforms.** 2021: Member of the review panel for the French **Agence Nationale del la Recherche call Structural Equipment for Research/EQUIPEX+.**

Research Merits

Summary of Research Articles and Research Presentations

33 articles in international scientific journals. 25 other articles in reviewed conference proceedings, most of these are in the fields of parallel algorithms/distributed computing/supercomputing where this is the standard format for presenting research results. **>40 oral research presentations at international conferences. Three keynote presentation and many other invited presentations.** Co-author of many more presentations.

PhD Student Supervision

Principal advisor for eleven PhD exams: H. Brandén, 2001 [Numerical Analysis], P. Sundqvist, 2005 [Numerical Analysis], shared with H. Brandén, K. Ljungberg, 2006 [Scientific Computing], K. Mishchenko, 2008 [Applied Mathematics, University of Mälardalen], M. Jayawardena, 2010 [Scientific Computing], S. Toor, 2012 [Scientific Computing], K. Kormann, 2012 [Scientific Computing with specialisation in Numerical Analysis], Carl Nettelblad, 2012 [Scientific Computing], Magnus Grandin, 2014 [Scientific Computing], Emil Kieri, 2016 [Scientific Computing], Behrang Mahjani, 2016 [Scientific Computing]. **Advisor for six other PhD exams** in Scientific Computing and Computer Science since 2006. **Principal advisor for ten Licentiate exams** since 1999 (H. Brandén, P. Sundqvist, K. Ljungberg, M. Jayawardena, K. Kormann, S. Toor, C. Nettelblad, M. Gustafsson, M. Holm, E. Kieri). **Advisor for eight other Licentiate exams,** including one in Quantum Chemistry.

Summary of Participation in Scientific Conference Organisation/Committees etc

Program Chair for the 7th IEEE International Conference on e-Science, Stockholm, 2011. **Member of the program committees for 17 international conferences** in Scientific Computing, High Performance Computing and related fields since 2004. **Organizer of 7 mini-symposia** within international scientific conferences during 2000-2016.

Opposition: Licentiate thesis, Bengt Hallinger, Department of Mathematics, Linköping University, 1996; PhD thesis, Saara Hyvonen, Institute of Mathematics, Helsinki University of Technology, Finland, 1999; Licentiate thesis, Mohammed Motamed, Department of Numerical Analysis, KTH, 2006; PhD thesis, Martin Sandve Alnæs, Department of Informatics, University of Oslo, 2009; PhD thesis, Tore Birkeland, Department of Mathematics, University of Bergen, 2009; PhD thesis, André Brodtkorb, Department of Informatics, University of Oslo, 2010; Licentiate thesis, Niclas Jansson, Department of Numerical Analysis, KTH; PhD thesis, Kurt Baarman, Department of Mathematics,

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Aalto University (Helsinki), 2012; PhD thesis, Raoul Bourquin, Seminar of Applied Mathematics, ETH (Zürich), 2016.

Member of the PhD examination committee for 17 PhD students at different Swedish universities, with thesis topics in Scientific Computing, Computer Science, Numerical Analysis, Materials Chemistry, High Energy Physics, Chemistry, and Physics/Astronomy.

External expert/evaluator for a position as “biträdande lektor” at Umeå University in 2011, an application for promotion to “Lektor” at Umeå University in 2017, and an appointment as professor at Luleå Technical University in 2012.

Selected earlier Reports in the Fields of Research Infrastructures/e-Infrastructures and e-Science

- NGSSC Progress Reports 1999, 2000, 2001 and 2002 - Author
- UPPMAX Progress Report 2006 - Author
- SNIC Progress Reports 2008-2009 and 2010-2011 – Main author and editor of contributed material
- Nordic eScience Action Plan 2008 – Member of editorial board
- [Nordic eScience Action Plan 2.0](#) (2015) – Main author and editor, project leader appointed by the Nordic Council of Ministers
- [Open Access to Research Data – Status, Issues and Outlook](#) (2016) – Main author and editor, project leader appointed by the Nordic Council of Ministers
- e-IRG [Policy Paper on Scientific Software](#) (2012) – Chair of editorial board
- e-IRG White Paper 2013: [The European e-Infrastructure Commons](#) – Member of editorial board
- e-IRG White Paper 2014: [Best practices for the use of e-Infrastructures by large-scale research infrastructures](#) – Chair of editorial board
- e-IRG Policy Paper on [National e-Infrastructure Nodes \(2019\): Getting organised; how far are we? Implementing e-Infrastructure Commons and the European Open Science Cloud](#) – Co-Chair of the editorial board (together with Arjen van Rijn, NL)
- SNIC 2.0 proposal (2017) – Main author and editor, chair of writing group appointed by UU and URFI
- [An outlook for the national roadmap for e-infrastructures for research](#) (2019) – Swedish Research Council. Member of the panel producing the report