



Curriculum Vitae --- March 2024

- **NAME:** NYSTRÖM Ingela Ann-Sofie (née NORDHAGE)
- **DATE AND PLACE OF BIRTH:** June 15, 1967, Umeå, Sweden
- **CIVIL STATUS:** Married, son born 1995 and daughter born 1997
- **EDUCATION**
 - 1985 *Studentexamen* at Härnösands gymnasium in natural sciences
 - 1990 Bachelor of Science (BSc) in Mathematics *Fil.kand. i matematik*
 - 1992 Master of Science (MSc) in Applied Computer Science *Fil.mag. i tillämpad datavetenskap*
 - 1997 Doctor of Philosophy (PhD) in Computerised Image Analysis (Thesis nominated to "Best Nordic Thesis Award in Image Analysis") *Fil.dr i datoriserad bildanalys*
 - 2002 *Docent* in Computerised Image Analysis *Docent i datoriserad bildanalys*
 - 2011 Professor of Visualization *Professor i visualisering*
at [Uppsala University](#), Sweden
- **MAIN APPOINTMENTS**
 - 1991-1997 PhD Student *Doktorandtjänst*
 - 1997-1999 Adjunct Senior Lecturer *tillfälligt lektorat*
 - 1999-2004 Postdoctoral Research Fellow *Forskarassistenttjänst*
at Centre for Image Analysis ([CBA](#)), Uppsala University, Sweden
 - 2004-2006 UPPMAX Application Expert in Scientific Visualization *Tillämpningsexpert inom vetenskaplig visualisering*
 - 2006-2011 Director of SNIC-UPPMAX *Föreståndare för SNIC-UPPMAX*
at Uppsala Multidisciplinary Center for Advanced Computational Science ([SNIC-UPPMAX](#)), Uppsala University, Sweden
 - 2004-2011 Senior Lecturer in Visualization *Universitetslektor i visualisering*
 - 2011-2011 Professor of Visualization *Professor i visualisering*
 - 2011-2015 Director of [eSSENCE](#) *Föreståndare för eSSENCE*
 - 2010-2011 Deputy Director of Centre for Image Analysis *Biträdande föreståndare för Centrum för bildanalys*
 - 2012-2022 Director of Centre for Image Analysis *Föreståndare för Centrum för bildanalys*
 - 2012-2018 Head of the Division of Visual Information and Interaction *Avdelningsföreståndare för Vi2*
 - 2015-2017 Professor responsible for research programme Image Analysis and Human-Computer Interaction *Programansvarig professor*
 - 2018-2020 Professor responsible for PhD studies in Computerised Image Processing *Forskarutbildningsansvarig professor*
 - 2020-2021 Subject Coordinator for Computer Science in the Advisory Committee for Education, Faculty of Science and Technology, Uppsala University, Sweden *Ämneskoordinator datavetenskap*
 - 2021-2021 Director of PhD studies *Studierektor forskarutbildning*
at the [Dept. of Information Technology](#), Uppsala University, Sweden
 - 2022-2022 Node Coordinator of InfraVis at Uppsala University - the national research infrastructure for visualization of data
 - 2024-2024 Deputy Director of WOMHER (Uppsala University's Centre of Women's Mental Health)
- **ORGANISATIONS**
 - Current involvements:**
 - Medtech4Health (Strategic innovation program for medical engineering)
 - * *Board member* 2022-
 - Sigma2 AS (Infrastructure for computational science in Norway)
 - * *Board member* 2019-
 - Royal Society of Arts and Sciences of Uppsala (Kungliga Vetenskapssamhället i Uppsala, KVSU)
 - * *Member* 2012-
 - * *Board member* 2016-
 - International Association for Pattern Recognition (IAPR)
 - * *Governing Board member* 2002-2010
 - * *Executive Committee member* 2008-2018: *2nd Vice-President* 2008-2010, *Secretary* 2010-2014, *President* 2014-2016, *Past President* 2016-2018
 - * *Nominating Committee: member* 2004-2006, *chair* 2016-2018, *member* 2018-2020
 - * *Constitutions and Bylaws Committee: chair* 2018-2020, *member* 2020-2022
 - * *King Sun Fu Prize Committee: member* 2022-2024
 - Past involvements (in selection):**
 - European Strategy Forum on Research Infrastructures ([ESFRI](#))
 - * *Member representing Sweden as expert* 2020-2022
 - Swedish National Infrastructure for Computing (SNIC)
 - * *Chair* 2020-2022
 - Council for Research Infrastructure (RFI), Vetenskapsrådet
 - * *Council member* 2014-2019: *Vice-Chair* 2015-2019
 - Swedish Society for Automated Image Analysis (SSBA)

* Board member 2000-2012: President 2002-2006
 * Nominating Committee member 2012-2016
 Swedish University computer NETwork (SUNET)
 * Board member 2008-2013
 Uppsala Multidisciplinary Center for Advanced Computational Science (SNIC-UPPMAX), Uppsala University
 * Board member 2013
 Faculty of Science and Technology, Uppsala University
 * Board member 2011-2014
 Docent Committee at Faculty of Science and Technology, Uppsala University
 * Member 2011-2014
 Linnaeus Centre for Bioinformatics (LCB), Uppsala University
 * Board member 2009-2010

■ TEACHING, development, and organisation of courses

1989-90 Amanuens at Dept. of Mathematics; student counselling, calculus courses

Under graduate courses at Dept. of Information Technology, Uppsala University:

1990- various courses in programming (Pascal, C, and C++)

1992- Computerised Image Analysis

1999- Advanced Computerised Image Analysis

2003- Computer Graphics

2006- Scientific Visualization

2019- Medical Informatics

Graduate courses at Centre for Image Analysis:

1993- various courses in Computerised Image Analysis, Image Processing, Digital Geometry, and Visualization

■ SUPERVISION

Post Doctoral:

- Ludovic Blache, 2016-2018

Project: Virtual Surgery Planning for Soft Tissue Resection on CT Images

Career: Researcher, Interactive Graphics and Simulation Group, University of Innsbruck, Austria

Past PhD Students:

1. Stina Svensson, PhD SLU, 2001-11-23 (assistant supervisor)
Title: Representing and Analysing 3D Digital Shape Using Distance Information
Career: Docent, Senior Research Engineer, RaySearch Laboratories AB
2. Joakim Lindblad, PhD UU, 2003-01-17 (assistant supervisor)
Title: Development of Algorithms for Digital Image Cytometry
Career: Professor in Computerised Image Processing, Dept. of Information Technology, UU
Previously Head of Research, Toptracer / Topgolf Sweden AB
3. Ida-Maria Sintorn, PhD SLU, 2005-04-01 (assistant supervisor)
Title: Segmentation Methods and Shape Descriptions in Digital Images - Applications in 2D and 3D Microscopy
Career: Professor in Computerised Image Processing, Dept. of Information Technology, UU
Previously CTO, Vironova AB
4. Natasa Sladoje, PhD SLU, 2005-11-25 (assistant supervisor)
Title: On Analysis of Discrete Spatial Fuzzy Sets in 2 and 3 Dimensions
Career: Professor in Computerised Image Analysis, Dept. of Information Technology, UU
5. Erik Vidholm, PhD UU, 2008-02-08
Title: Visualisation and Haptics for Interactive Medical Image Analysis
Career: Previously Image Processing and Visualization Group Manager, RaySearch Laboratories AB
6. Filip Malmberg, PhD UU, 2011-05-06
Title: Graph-based Methods for Interactive Image Segmentation
Career: Associate Professor, Dept. of Information Technology, UU
7. M Khalid Khan Niazi, PhD UU, 2011-10-25 (assistant supervisor)
Title: Image Filtering Methods for Biomedical Applications
Career: Assistant Professor, Wake Forest University School of Medicine, Winston-Salem, North Carolina, USA
8. Lennart Svensson, PhD SLU, 2014-11-24 (assistant supervisor)
Title: Image Analysis and Interactive Visualisation Techniques for Electron Microscopy Tomograms
Career: Computer Consultant, HiQ, Västerås
9. Johan Nysjö, PhD UU, 2016-09-30
Title: Interactive 3D Image Analysis for Cranio-Maxillofacial Surgery Planning and Orthopedic Applications
Career: Previously Software Developer Visualization, RaySearch Laboratories AB
10. Robert Nedelcu, MD UU, 2020-02-14 (assistant supervisor, Dept. of Surgical Sciences)
Title: In Vivo Accuracy and Precision in Prosthodontics
Career: Senior Lecturer, Dental School, University of Western Australia, Perth, Australia
11. Fredrik Nysjö, PhD UU, 2020-03-13
Title: Modeling and Visualization for Virtual Interaction with Medical Image Data
Career: Previously Research Engineer, Dept. of Information Technology, UU
12. Maïke Paetzel, PhD UU, 2020-10-23 (assistant supervisor)
Title: The Novelty in the Uncanny: Designing Interactions to Change First Impressions
Career: Associate Researcher, Disney Research, Switzerland
Previously PostDoc, University of Potsdam, Germany
13. Karl Bengtsson Bernander, PhD UU, 2024-03-01
Title: Equivariant Neural Networks for Biomedical Image Analysis
Licentiate UU, 2021-12-22
Licentiate title: Improving Training of Deep Learning for Biomedical Image Analysis and Computational Physics

Current PhD Student:

- Can Deniz Bezek, start November 2021 (assistant supervisor)
Preliminary PhD title: Deep Learning in Ultrasound Image Reconstruction

Licentiate:

- Emma Lindqvist, Licentiate SLU, 1999-09-03 (assistant supervisor)
Title: Automatic and Interactive Information Extraction from Hyperspectral Imagery

SIDA project: Suthakar Somaskandan, 2004-2008

Master thesis students

Supervised approximately 4 students per year in my early career.
Subject reviewer for approximately 4 students per year in later years.

- **CONFERENCE INVOLVEMENTS:** arrangements committee member of appr. 15 conferences, program committee member of appr. 30 conferences, 8 invited speaker
- **PUBLICATIONS:** 3 book chapters, appr. 30 journal publications, appr. 50 fully reviewed conference manuscripts, a dozen edited books and journal issues
- **EVALUATION ASSIGNMENTS:** 4 PhD opponent and examiner, appr. 30 PhD evaluation committee, reviewer for scientific councils and journals, assessment of academic positions