



SVENSKA
SÄLLSKAPET
FÖR
AUTOMATISERAD
BILDANALYS

SWEDISH
SOCIETY
FOR
AUTOMATED
IMAGE ANALYSIS

MEMBER OF THE INTERNATIONAL SOCIETY OF PATTERN RECOGNITION

SSBAktuell

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Title photo: Elisabeth Wetzer

SSBAktuellt

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June 2022

Ordförandes Ord



Amanda Berg

Vuxna människor pillar inte in saker i näsan.

Jag har varit föräldraledig och/eller jobbat hemifrån till och från sedan sommaren 2020. Helt underbart men också kämpigt. Förra veckan hade jag ett möte på universitet och då slogs jag plötsligt av att alla satt stilla. Vuxna människor har inte myror i brallan, vuxna människor går på toa när de behöver och framför allt, vuxna människor lyssnar på vad man säger och väntar till andra har talat till punkt.

Med tanke på min alltför långdragna föräldraledighet så känns det extra kul med föreningsarbetet. På årsmötet i mars valdes jag till ny ordförande för föreningen, ett ärofyllt uppdrag som jag verkligen ser fram emot att ta mig an. Hela fyra nya ledamöter valdes in och det känns så kul att få jobba tillsammans med detta underbara gäng vuxna människor. Om du är nyfiken på vilka vi är så finns det en presentation av styrelsen i detta nummer.

I övrigt innehåller detta nummer information om aktuella stipendier som är möjliga att söka hos IAPR samt en rapport från SSBA, SSDL och DAS 2022. I vanlig ordning håller vi er även uppdaterade om kommande avhandlingar, kurser och konferenser. Missa inte heller artikeln om "The Mirazakhani Issue".

Slutligen vill jag önska er alla en riktigt härlig sommar! Tveka inte att höra av dig till mig eller någon annan i styrelsen om du har några frågor eller idéer. Vi finns här för dig!

June 2022, Sweden

A Word from the Editors

Join the SSBAktuellt Editorial Team

Dear SSBA Community,

We are looking for new members on the editorial board of SSBAktuellt! Are you interested in gathering and compiling information about what is happening in the image analysis community across Sweden? We are using the open-source software Scribus which runs on all operating systems. No prior knowledge is required! If you have any questions or want to join us, please contact us at redaktionen@ssba.org.se.

Best regards,

Raphaela & Elisabeth from SSBAktuellt Redaktionen



Elisabeth

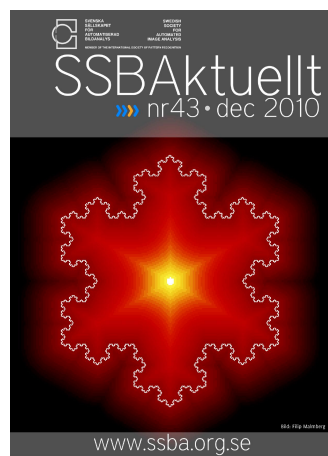


Raphaela

A Word from the Editors

Call for SSBAktuellt Cover Images

Do you have photos, images or graphics you would like to share with the SSBA community that would fit the SSBA newsletter? Images connected to Sweden, your research, SSBA activities or graphics which relate to image analysis are all welcome! Please send your proposals to redaktionen@ssba.org.se.



Introductions

The New SSBA Board

A new SSBA board was elected at the latest annual meeting. The new board members are Amanda Berg, Ida-Maria Sintorn, Niels Christian Overgaard, Mårten Wadenbäck, Atsuto Maki, Joakim Lindblad, Hagen Spies and Marcus Liwicki. Some members are introduced on the following pages.

Amanda Berg (ordförande)

Termisk Systemteknik AB (TST) and Linköping University

Amanda defended her PhD thesis in December 2019. As an industrial PhD student at TST and LiU, she got the best from both industry and academia. Since then, she has worked part-time at TST and LiU but mostly been on maternal leave. She became a part of the board in 2016 and has been the treasurer of the association between 2018-2022.

1. What is your relation to image analysis (the focus on your research, industry aspects of your developments, etc)?

My focus of research lies within image analysis for thermal infrared images.



2. What are your plans and goals for SSBA in the period of your board membership?

To strengthen the community and to extend it from a geographical point of view.

3. Do you have one piece of advice for PhD students in image analysis?

Stay focused on the goal but often it is in the detours that the magic happens!

Ida-Maria Sintorn (vice-ordförande)

Professor at the Centre for Image Analysis, UU & CTO at Vironova AB

Ida-Maria shares her time between industry and academia. She is the Chief Technology Officer at Vironova AB, a Swedish biotechnology company providing services for nano-sized biopharmaceutical particle characterization based on electron microscopy and image analysis. She is also a Professor at the Centre for Image Analysis, Uppsala University where she performs image analysis research focused on automated microscopy and how make deep learning useful in biomedical reality. She is dedicated to strengthening and increasing collaboration between industry and academia and serves as the collaboration coordinator at the Dept. IT, UU.

Ida-Maria holds a MSc i Molecular Biotechnology Engineering from UU and obtained her PhD in computerized image analysis from the SLU 2005. She then worked as a research scientist (image analyst) at CSIRO in Sydney Australia for two years before returning to Sweden and starting her mixed Vironova-UU career.



1. What is your relation to image analysis (the focus on your research, industry aspects of your developments, etc)?

My research focus is on analysis and machine learning methods for clinical and pharmaceutical microscope images.

2. What are your plans and goals for SSBA in the period of your board membership?

To keep the strong community feeling in our national society and extend it with more academic and industry members

3. Do you have one piece of advice for PhD students in image analysis?

Collaborate and try to see and explore different applications/domains.

Mårten Wadenbäck (kassör)

Assistant Professor at Linköping University

I did my undergraduate and PhD studies in my home town, at Lund University, defending my thesis in 2017. After two years as visiting lecturer at Chalmers & University of Gothenburg, I joined the Computer Vision Laboratory at Linköping University, where I have remained since 2019.



1. What is your relation to image analysis (the focus on your research, industry aspects of your developments, etc)?

I am interested in problems concerning geometry estimation, especially multi-structure estimation. Lately, I have also started looking into how to represent geometry in neural networks in a way that preserves certain desirable properties.

2. What are your plans and goals for SSBA in the period of your board membership?

While I did not join the board with a specific agenda, one thing that I would like to help with is to make SSBA even more accessible and relevant to our students in the late stage of their studies and early careers.

3. Do you have one piece of advice for PhD students in image analysis?

The field is developing rapidly, so be open to new ideas and don't become too attached to one particular idea or approach.

Joakim Lindblad

Professor in Image Processing at the Centre for Image Analysis, IT-dept., Uppsala University

Joakim holds a MSc in Engineering Physics (1997) and a PhD in Computerized Image Analysis (2003) from Uppsala University. He has extensive experience of theoretical and applied development, use, and commercialization of image analysis methods and software. He is one of the inventors and main developer of the real time video tracking technology of Protracer AB, now TopGolf Sweden AB.

His current research interests include aspects of Deep Learning for Image Analysis, multimodal representation learning and eXplainable AI. He is creator of, and responsible for, several PhD and Master courses on the topic of Deep Learning. He is PI for several research projects aiming to harness the power of modern data driven image analysis for practical use in biomedicine and healthcare.

1. What is your relation to image analysis (the focus on your research, industry aspects of your developments, etc)?

My research involves development of image analysis methods and algorithms; it is typically driven by concrete problems in healthcare while aiming for generality. Lately it's a lot of deep learning and XAI for cancer diagnostics.



2. What are your plans and goals for SSBA in the period of your board membership?

To strengthen and vitalise the community, reaching out to early career researchers and start-up companies.

3. Do you have one piece of advice for PhD students in image analysis?

Trust your intuition about which paths to explore; don't try too many things, but instead go a bit deeper - that's where the interesting questions appear; don't shy away from theory.

Hagen Spies

Combitech AB

I'm from Heidelberg in southern Germany, where I received a PhD in Physics (remote sensing) which included a year at the University of Western Ontario in Canada. I also got an MSc in Computing from the University of Dundee, Scotland, in 1995. Early 2002 I joined the computer vision lab in Linköping as a postdoc and have worked for various image analysis companies in Sweden since 2003. Recently moved to Stockholm and currently Technology Leader for Machine Vision at Combitech.



1. What is your relation to image analysis (the focus on your research, industry aspects of your developments, etc)?

I'm mainly working with computer vision applications within the automotive and process industry sectors covering both the selection of appropriate sensor technology and the development of image analysis algorithms.

2. What are your plans and goals for SSBA in the period of your board membership?

Being new to the board I hope to contribute with an industrial perspective on things like education and joint academic-industry projects.

Marcus Liwicki

Luleå University of Technology (vice rector and chair of the Machine Learning group)

Marcus Liwicki received his M.S. degree in Computer Science from the Free University of Berlin, Germany, in 2004, his PhD degree from the University of Bern, Switzerland, in 2007, and his habilitation degree at the Technical University of Kaiserslautern, Germany, in 2011. Currently he is chaired professor in Machine Learning and vice-rector for AI at Luleå University of Technology. His research interests include machine learning, pattern recognition, artificial intelligence, human computer interaction, digital humanities, knowledge management, ubiquitous intuitive input devices, document analysis, and graph matching. From October 2009 to March 2010 he visited Kyushu University (Fukuoka, Japan) as a research fellow (visiting professor), supported by the Japanese Society for the Promotion of Science. In 2015, at the young age of 32, he received the ICDAR young investigator award, a bi-annual award acknowledging outstanding achievements of in pattern recognition for researchers up to the age of 40.

1. What is your relation to image analysis (the focus on your research, industry aspects of your developments, etc)?

I have been working on handwriting recognition already since my Master studies in 2004. At that time I focused on drawings of electronic circuits. Then, during my PhD from 2004-2007, I worked on the recognition of free texts with electronic pens. Fortunately, I was working in Switzerland and came in contact with the two research Institutes IDSIA (Schmidhuber) and IDAP (Bengio), widening my horizon about deep learning capabilities and the importance of proper statistical significance testing for any Machine Learning publication. During my time as Senior Researcher at DFKI, I exploited more recent methods on industrial documents and then also became the head of research at a company



(Insiders Technologies), focusing on practical challenges in banking and insurance documents. As a chair of the machine learning research group here in Luleå, I guide several PhD students on their journey to research on Machine Learning methods for the welfare of the society. That involves documents (printed or handwritten, modern or historic), 3D scans of the body (brain activity, or (breast) cancer), as well as industrial scans in various applications

2. What are your plans and goals for SSBA in the period of your board membership?

I wish to broaden the research spectrum of SSBA again and to involve more the fundamental ML research, which is crucial for many applications in Image analysis. Furthermore, I hope that we can connect better to the international research society and bring some conferences to Sweden.

3. Do you have one piece of advice for PhD students in image analysis?

My general advice is to focus not on the problems everyone is looking at, but to find your own topic. Furthermore, discuss with more people than just your supervisor and get a great overview of the topic, before deciding on the specific PhD thesis topic.

Conference Report

SSBA and SSDL 2022

Arvi Jonnarth reports on the Swedish Symposium on Image Analysis (SSBA) and the Swedish Symposium on Deep Learning (SSDL) which took place remotely in March 2022.



Image: Elisabeth Wetzer

The thirty-ninth annual Swedish Symposium on Image Analysis (SSBA) was held on March 15 and 16, in connection to the fifth annual Swedish Symposium on Deep Learning (SSDL) held the day before. I was looking forward to visiting my home town where the event was planned to be held at Uppsala University. Unfortunately, the COVID-19 restrictions were still upon us, forcing the event to be held in a virtual format.

To get at least some piece of the live conference feeling, we gathered locally at Linköping University, where we watched the presentations together on Zoom through a big projector screen.

The symposium consisted of many interesting contributed talks, inspirational industry sessions, and interactive poster sessions. The topics included feature learning, registration, localization, biomedical tools, and image reconstruction. I found it especially interesting to listen to the various talks within medical image analysis, even though I have no background in this field.

The symposium also featured inspiring keynote presentations on interesting topics, such as Historical Document Analysis (Marcus Liwicki), and Deep Learning for Bioimage Analysis (Virginie Uhlmann).

To me, a key part of in-person conferences are the poster sessions where you have the opportunity to really interact with people in the same field. In this regard, I think that the organizers managed to tackle the challenges of hosting an online event quite well. The poster sessions were nicely organized in Gather.Town, and I managed to get some good discussions with the other symposium attendees. It was also nice to get the chance to interact with fellow PhD students.

Overall, I enjoyed the symposium and I am hoping that we can meet in person next year!

The Author

Arvi Jonnarth
Industrial PhD student
Linköping University and Husqvarna

Conference Report

DAS 2022 EISLAB ML LTU Contribution

Konstantina Nikolaidou reports on the 15th IAPR International Workshop on Document Analysis Systems, May 2022, La Rochelle, France



Image: DAS organisers

The [15th IAPR International Workshop on Document Analysis Systems](#) is one of the major international events related to document analysis and recognition, focusing on system-related topics. The conference took place in La Rochelle, France, in May 2022 and provided a hybrid mode for both online and onsite participation. The workshop program included one tutorial, two keynotes (Prof. Adam Jatowt and Prof. Andreas Dengel), five oral sessions, and two poster sessions. A particularly interesting part of DAS was the discussion groups, where participants could actively join each group related to the following five topics: Low resourced script document Analysis, Emerging applications in Industry, Document analysis for social media and Document forensics. Finally, the event provided a nice boat cruise around the three islands (Ré, Aix and Oléron) and the well-known Fort Boyard, concluding to a cocktail boat dinner with delicious seafood.

The [EISLAB Machine Learning](#) group of Luleå University of Technology presented the work

[“Investigating the Effect of Using Synthetic and Semi-synthetic Images for Historical Document Font Classification”](#) in the poster session, authored by Konstantina Nikolaidou, Richa Upadhyay, Mathias Seuret and Marcus Liwicki. The session was very active, and the participants were very interested in discussing and exchanging ideas in a constructive and friendly way.

After discussions and voting within the community, it was decided that DAS will be held as a workshop within the International Conference on Document Analysis and Recognition (ICDAR) instead of an independent workshop. ICDAR will become an annual conference, with the 2024 event in Athens, Greece.

The Author

Konstantina Nikolaidou,
PhD student in Machine Learning,
Luleå university of Technology

Announcement

Call for Applications for IAPR Research Scholarships

IAPR Research Scholarships seek to make possible mobility across institutions and international boundaries for Early Career Researchers working in fields within the scope of the IAPR's interests. The scholarship covers round trip travel & basic living expenses for a visit of less than 12 months. The candidate must be a full-time researcher with between one and eight years experience. The candidate must also be a member of an IAPR member

society. COVID-19: Applications are welcome, assuming pandemic travel regulations allow a visit during the proposed period.

Contact information:

IAPR Secretariat, c/o Linda O'Gorman, secretariat@iapr.org

More information:

<https://iapr.org/docs/IAPR-EC-RS-Call-2018.pdf>

Announcement

IAPR Call for Proposals for Summer Schools

Summer/winter schools are training activities that expose participants to the latest trends and techniques in the particular pattern recognition field. To be eligible for a grant, the organizers must work through at least one of the IAPR's technical committees as they develop and present the proposal.

How to Submit: Proposals for IAPR funded

summer/winter schools should be submitted to IAPR Secretariat Linda O'Gorman by email (secretariat@iapr.org). A PDF attachment containing all the required information is appreciated

More information:

iapr.org/conferences/summerschools.php

Deadline: October 1, 2022

Announcement

IAPR Call for Student Industrial Internship Listings

The IAPR-ILC wishes to promote opportunities for students to undertake internships at companies working in Pattern Recognition, AI, Computer Vision, Data Mining, Machine Learning, etc. We propose to do this by having a web-based internship listing service. Companies can list their internship opportunities; students can browse the listings

and contact the company.

Contact information: Bob Fisher, Chair IAPR-Industrial Liaison Committee, rbf@inf.ed.ac.uk

IAPR Company Internship Brokerage List: <https://homepages.inf.ed.ac.uk/rbf/IAPR/INDUSTRIAL/>

Outlook 2022

Upcoming Conferences



JUNE

CVPR 2022

<http://cvpr2022.thecvf.com/>

June 19-21, 2022 - New Orleans, Louisiana, US

JULY

Intl. Conference on Pattern Recognition and Machine Learning (PRML)

https://conferences.ieee.org/conferences_events/conferences/conferencedetails/56267

July 15-17, 2022 - Chengdu, China

7th Intl. Conference on Image, Vision and Computing (ICIVC)

<http://www.icivc.org>

July 26-28, 2022 - Xi'an, China

AUGUST

5th Intl. Conference on Pattern Recognition and Artificial Intelligence (PRAI)

<http://www.prai.net/>

August 19-21, 2022 - Chengdu, China

Intl. Conference on Pattern Rec. (ICPR 2022)

<https://www.icpr2022.com/>

August 21-25, 2022 - Montreal, Canada

IEEE 32nd Intl. Workshop on Machine Learning for Signal Processing (MLSP)

<https://2022.ieeemlsp.org/>

August 22-25, 2022 - Xi'an, China

IAPR Joint International Workshops on Statistical Techniques in Pattern Recognition (SPR 2022) and Structural and Syntactic Pattern Recognition (SSPR 2022)

<https://sspr2022.encs.concordia.ca/>

August 26-27, 2022 - Montreal, Canada

SEPTEMBER

10th European Workshop on Visual Information Processing (EUVIP)

<https://euvip2022.org/>

September 13-16, 2022 - Lisbon, Portugal

12th Workshop on Hyperspectral Imaging and Signal Processing: Evolution in Remote Sensing (WHISPERS)

<http://www.ieee-whispers.com/>

September 13-16, 2022 - Rome, Italy

25th Intl. Conf. on Medical Image Computing and Computer Assisted Intervention (MICCAI)

<https://conferences.miccai.org/2022/en/default.asp>

September 18-22, 2022 - Singapore

4th International Conference on Robotics and Computer Vision (ICRCV)

<http://www.icrcv.org/>

September 25-27, 2022 - Wuhan, China



OCTOBER

European Conference on Computer Vision (ECCV)

<https://eccv2022.ecva.net/>

October 23-27 2022- Tel Aviv, Israel

Intl. Joint Conference on Biometrics (IJCB)

<https://ijcb2022.org/#/>

October 24-27, 2022 - Abu Dhabi, UAE

IEEE International Conference on Image Processing (ICIP)

<https://2022.ieeeicip.org/>

October 16-19, 2022 - Bordeaux, France

IEEE Visualization and Visual Analytics (VIS)

<http://ieeevis.org/year/2022/welcome>

October 16-21, 2022 - Oklahoma City, US

Intl. Conference on Discrete Geometry and Mathematical Morphology (DGMM)

<https://dgmm2022.sciencesconf.org>

October 24-27, 2022 - Strasbourg, France

NOVEMBER

International Visualization, Informatics and Technology Conference (IVIT)

https://www.canva.com/design/DAEvllbKWOM/0SceN6xIAN1UgK_CllcViA/view?website=&utm_medium=CFP#1:home

November 1-2, 2022 - Kuala Lumpur, Malaysia

7th Intl. Conf. on Computer Vision & Image Processing

<https://vnit.ac.in/cvip2022/>

November 4-6, 2022 - Nagpur, India

10th IAPR Workshop on Artificial Neural Networks in Pattern Recognition (ANNPR)

<https://annpr2022.com/>

November 24-26, 2022 - Dubai, UAE

Conference on Neural Information Processing Systems (NeurIPS)

<https://neurips.cc/>

November 29- December 7, 2022 - New Orleans, Louisiana, US

DECEMBER

International Conference on Frontiers in Handwriting Recognition (ICFHR)

<http://icfhr2022.org/>

December 04-07, 2022 - Hyderabad, India

Asian Conference on Computer Vision (ACCV)

<https://accv2022.org/en/>

December 04-08, 2022- Macau, China

IEEE 5th International Conference on Image Processing Applications and Systems (IPAS)

<https://ipas.ieee.it>

December 5-7, 2022 - Genoa, Italy

APRIL

Intl. Symposium on Biomedical Imaging (ISBI)

<https://biomedicalimaging.org/2023/>

April 17-21, 2023 - Cartagena de Indias, Colombia

Scandinavian Conference on Image Analysis (SCIA)

<https://sites.google.com/view/scia2023/>

April 18-21, 2023 - Levi, Finland

Conference Announcement

ICPR 2022

Registration open at the International Conference on Pattern Recognition!



The 26th International Conference on Pattern Recognition

Montréal, Québec, Canada
August 21-25, 2022

<https://iapr.org/icpr2022>

Workshop Title	Workshop Title
AI For - ICPR Workshop on Artificial Intelligence for Multimedia Forensics and Disinformation Detection	MMForWILD - Workshop on MultiMedia FORensics in the WILD
AI4D - AI for De-escalation: Autonomous Systems for De-escalating Conflict in Military and Civilian Contexts	MPRSS - 7th IAPR Workshop on Multimodal pattern recognition for social signal processing in human computer interaction
CVAUI - 5th Workshop on Computer Vision for Analysis of Underwater Imagery	PatReCH 2022 - III International Workshop on Pattern Recognition for Cultural Heritage
DLVDR - Deep Learning for Visual Detection and Recognition	PRHA - ICPR 2022 Workshop on Pattern Recognition in Healthcare Analytics
FaceDrone - Face Recognition Under Drone Surveillance Concerning Turbulence	PRRS - 12th Workshop on Pattern Recognition in Remote Sensing
FAIRBIO - ICPR 2022 Workshop on Fairness in Biometric Systems	RRPR - Fourth Workshop on Reproducible Research in Pattern Recognition
FOREST - Image analysis for forest environmental monitoring	SSL - Theories, Applications, and Cross Modality for Self-Supervised Learning Models
GLESDO - 2nd international workshop on Graph Representation Learning for Scanned Document Analysis	T-CAP - Towards a Complete Analysis of People: From Face and Body to Clothes
HBU - 12th Int. Workshop on Human Behavior Understanding	UMDBB - Understanding and Mitigating Demographic Bias in Biometric Systems
IML - 2nd International Workshop on Industrial Machine Learning	VAIB - Visual observation and analysis of Vertebrate And Insect Behavior
IMTA - 8th International Workshop "Image Mining, Theory and Applications"	WIDAV - Workshop on Identity Document Analysis and Verification
MANPU - The 5th International Workshop on coMics Analysis, Processing and Understanding	XAIE - 2nd Workshop on Explainable and Ethical AI
MDMDR - Multimodal Data for Mental Disorder Recognition	
Challenge Title	Challenge Title
ODEuropa Competition on Olfactory Object Recognition - ODOR	Real-World Video Understanding for Urban Pipe Inspection - VideoPipe
Multimodal Subtitle Recognition - MSR	Moving Object Detection and Tracking in Satellite Videos - SatVideoDT
Face Recognition Under Drone Surveillance Concerning Turbulence - FaceDrone	Detection of wastewater contaminants through low cost sensors: a multi-class problem - WaterContaminants
Competition on HARvesting Raw Tables from Infographics - CHART-Infographics	

ICPR 2022 is the flagship conference of IAPR, the International Association of Pattern Recognition. Professionals working in computer vision, image, sound, speech, pattern recognition, and machine intelligence can update their knowledge and sharpen their skills in all subspecialties of pattern recognition.

ICPR 2022 will primarily be held in person in **Montreal, QC**, but remote presentations and attendance will be accommodated.

For more information, please visit:

<https://www.icpr2022.com/>

General topics of interest:

- Artificial intelligence, Machine Learning for Pattern Analysis
- Computer Vision, Robotics and intelligent Systems
- Image, Speech, and Signal Analysis
- Biometrics, Human Analysis and Behavior Understanding
- Document and Media Analysis
- Biomedical Image Analysis and Informatics

Conference Announcement

SCIA 2023

Welcome to the Scandinavian Conference for Image Analysis!



CONFERENCE ON LAPLAND IMAGE ANALYSIS
SCIA 2023

SCIA 2023 Call for papers
22nd Scandinavian Conference for Image Analysis (SCIA)
April 18-21, 2023, Hotel Levi Panorama, Lapland, Finland

SCIA 2023 invites submissions presenting original work in computer vision and pattern recognition. See the Website for a list of topics.

Important dates:
First round paper submission: **July 29 2022**
First round author notifications: **September 30 2022**
Second round paper submission: **December 9 2022**
Second round author notification: **February 3 2023**

Conference chairs:
General chair: Jiri Matas
Program chairs: Michael Felsberg, Rikke Gade, Joni Kämäräinen

Website: <https://sites.google.com/view/scia2023>
Venue information: levi.fi/en

 **Springer**
Lecture Notes in Computer Science
LNCS LNAI LNBI

Photo source: Visit Levi



The Scandinavian Conference on Image Analysis (SCIA) is a biennial conference on computer vision, image processing, pattern recognition and machine learning. It has been held since 1980 in the Scandinavian countries Sweden, Denmark, Norway and Finland. In 2023, SCIA will be organized as a winter conference in one of the most popular and exotic ski resorts in Finland, Levi. The conference program will contain top invited speakers, high quality scientific presentations, winter sports and mystique of Lapland.

SCIA 2023 is an all-inclusive winter conference that will combine top quality tutorials and plenary talks from distinguished researchers, high quality scientific program of oral and poster presentations, coffee breaks, lunches, dinners, Lapland banquet and sport breaks every day for those winter sport enthusiast and those who want to try them first time

(introductory courses and sports gear available to participants). You will also experience some of the positive craziness of Lapland. Are you ready for this challenge?

SCIA has two-stage submission and authors may submit in either round.

1st submission deadline: July 29, 2022

Notifications: September 30, 2022

2nd submission deadline: December 9, 2022

Notifications February 3, 2023

Camera-ready: February 24, 2023

Tutorials: April 18 2023

Main conference: April 19 - 21, 2023

SCIA 2023 accepts long and short papers. The maximum allowed length is 9 and 14 pages for short and long papers, respectively.

More information:

<https://sites.google.com/view/scia2023>

Outlook 2022

Summer/Winter Schools 2022

2022 Summer school on deep learning for medical imaging, 3rd Edition
<https://event.fourwaves.com/32600610-b50a-4feb-b431-31ee1d773873/pages>
July 4-8, 2022 - Montréal, Canada

Switzerland's Image and Data Analysis School
<https://2022.zidas.org>
July 10-15, 2022 - Lausanne, Switzerland

CIMPA School on Mathematical Methods in Data Analysis
<https://sites.google.com/view/mathschoolinalbania/home>
July 18-29, 2022 - Tirana, Albania

DeepLearn Summer 2022 : 7th International Gran Canaria School on Deep Learning
<https://irdta.eu/deeplearn/2022su/>
July 25-29, 2022 - Gran Canaria, Spain

Accessible Visualizations: Conveying Introduction to the mathematics of X-ray imaging: X-ray transforms
<https://www.jyu.fi/en/research/summer-and-winter-schools/jss/courses/courses-in-mathematics-and-statistics>
August 8-12, 2022 - Jyväskylä, Finland

Information Across Sensory Modalities
<https://www.jyu.fi/en/research/summer-and-winter-schools/jss/courses/courses-in-cognitive-science>
August 15-19, 2022 - Jyväskylä, Finland

Summer School on Aspects of Optimization
<https://www.aau.at/mpopt/events/summer-school-on-aspects-of-optimization/>
September 12-16, 2022 - Klagenfurt, Austria

DeepLearn 2022 Autum
<https://irdta.eu/deeplearn/2022au/>
October 17-21, 2022 - Luleå, Sweden

Announcement

Swedish Network for Phd Courses in HCI

HUMAN-COMPUTER INTERACTION (HCI) is a topic within related fields such as informatics and design. Sweden is fairly strong in HCI, where PhD education in HCI and related fields are offered by several universities, each within their own area of excellence. We could, and should, collaborate and learn from each other. In the wake of the pandemic, distance learning and teaching has made a ten-year leap in Swedish academia, including forms of PhD studies. All the pieces are now in place for informal national collaboration on PhD studies in HCI. Our aim is to offer Swedish PhD students in HCI and related fields a selection of PhD courses and seminars from universities around the country. More information: <http://www.shci.se/#courses>

Course Spotlight:

Ethics of AI and interactive autonomous systems

Course supervisor: **Tom Ziemke** (Professor of Cognitive Systems at LiU)
6 credits, mid Sept 2022 - mid Jan 2023

The course addresses different ethical issues relevant to AI, with a focus on human interaction with autonomous technologies, such as social robots and automated vehicles. The course combines background literature on different ethical theories and frameworks with recent articles on current research issues (e.g. explainable AI) and current debates of societal relevance (e.g. autonomous weapon systems).
<https://www.ida.liu.se/edu/grad/course/717/>

Announcement

Aktuella Avhandlingar

Här presenteras de avhandlingar som publicerats sedan senaste numret av SSBAktuellt och kommit redaktionen till känna. Meddela redaktionen om aktuella avhandlingar



Licentiatsavhandlingar

Axel Berg

Lund Universitet

[Applications of Diversity and the Self Attention Mechanism in Neural Networks](#)

Oliver Stromann

Linköping Universitet

[Data-Driven Classification in Road Networks](#)

Doktorsavhandlingar

Johan Öfverstedt

Uppsala Universitet

[Methods for Reliable Image Registration: Algorithms, Distance Measures, and Representations](#)

Håkan Wieslander

Uppsala Universitet

[Application, Optimisation and Evaluation of Deep Learning for Biomedical Imaging](#)

David Nilsson

Lund Universitet

[Data-Efficient Learning of Semantic Segmentation](#)

Mikael Persson

Linköping Universitet

[Visual Odometry in Principle and Practice](#)

Joakim Johnander

Linköping Universitet

[Dynamic Visual Learning](#)

Oluwatosin Adewumi

Luleå Tekniska Universitet

[Vector Representations of Idioms in Data-Driven Chatbots for Robust Assistance](#)

Priyamvada Shankar

Luleå Tekniska Universitet

[Data Driven Crop Disease Modeling](#)

Science Outreach & Entertainment

The Mirzakhani Issue

Read the latest mathy science comic honoring the first woman to receive the Fields Medal.



For May 12, the new issue of the Comics & Science series was published, The Mirzakhani Issue, produced by Cnr Edizioni in collaboration with the Italian Mathematical Union, which contains the story UNDER THE SIGN OF TORUS, written by Davide La Rosa and drawn by Silvia Ziche. [Here you can read and download the full volume.](#)

What is mathematical billiards? What trajectory does the ball make when bouncing off its tables? Is it possible to find a billiard table where, given the starting point of the ball, there are inaccessible points? And what do donuts and pretzels have to do with it? Some of

these curious questions – actually, profound mathematical questions – were sought by mathematician Maryam Mirzakhani, the first woman to win the Fields Medal. Maryam Mirzakhani was an outstanding mathematician, one of the most notable minds of this millennium, and May 12, 1977 is her date of birth. When she died on July 15, 2017, the pain in the mathematical community was so enormous that in 2018, on the occasion of the 1st World Congress of Women in Mathematics, it was decided that May 12 would become the date on which to celebrate all the women in mathematics.