



SVENSKA  
SÄLLSKAPET  
FÖR  
AUTOMATISERAD  
BILDANALYS

SWEDISH  
SOCIETY  
FOR  
AUTOMATED  
IMAGE ANALYSIS

MEMBER OF THE INTERNATIONAL SOCIETY OF PATTERN RECOGNITION

# SSBAktuellt

»»» nr 65 december 2021



[www.ssba.org.se](http://www.ssba.org.se)

## INNEHÅLL

- 3 **January 2021**  
Ordförandes Ord
- 4 **New SSBAktuellt Design**  
A Word from the Editors
- 5 **Infrastructure Introduction**  
ENCCS - National Competence Center for Sweden is here to help you
- 6 **Arena Report**  
AIDA Update
- 8 **Conference Report**  
ACM International Conference on Multimodal Interaction
- 9 **Conference Report**  
ICDAR 2021 EISLAB ML LTU Contribution
- 10 **Summer School Report**  
4th IAPR TC 10/11 Summer School on Document Analysis
- 11 **Announcement**  
Nordic DAIR Award for Stora Enso's Computer Vision Platform
- 12 **Announcements**  
ELLIIT Linköping-Lund excellence centre  
New Graduate School in Data-Intensive Science
- 13 **Announcements**  
Call for Applications for IAPR Research Scholarships  
IAPR Call for Proposals for Summer Schools  
IAPR Call for Student Industrial Internship Listings
- 14 **Conference Announcement**  
SSBA+SSDL 2022
- 15 **Conference Announcement**  
SSBA+SSDL 2022
- 16 **Outlook 2022**  
Upcoming Conferences
- 18 **Outlook 2022**  
Summer/Winter Schools 2022  
Soapbox Science
- 19 **Announcement**  
Aktuella Avhandlingar

Title photo: Elisabeth Wetzer

**SSBAktuellt**

SSBAktuellt är ett föreningsblad med information av nationell karaktär. Redaktionen kan nås på e-post [redaktionen@ssba.org.se](mailto:redaktionen@ssba.org.se)

**Postadress:**

SSBAktuellt  
Centrum för bildanalys  
Box 337  
751 05 Uppsala

**Website:** [ssba.org.se](http://ssba.org.se)

**Ordförande:**

Ida-Maria Sintorn, [ssba@ssba.org.se](mailto:ssba@ssba.org.se)

**Redaktion:**

Elisabeth Wetzer  
Raphaella Heil  
Nadezhda Koriakina

January 2022

## Ordförandes Ord



Ida-Maria Sintorn

Kära medlemmar!

Hoppas ni alla haft en skön jul- och nyårsledighet!

Här kommer det något försenade utskicket av 2021 års decembernummer av SSBAktuellt. Förutom det vanliga smått och gott om nya avhandlingar, kurser och konferenser, får ni i det här numret bl.a. en uppdatering och framåtblick av AIDA, samt en beskrivning av hur ni alla både ni i industrin och akademien kan få tillgång till beräkningsresurser via ENCCS.

Glöm inte skicka in era artiklar till ICPR nu i januari och anmäl er och boka in SSBA och SSDL den 14-16 mars! Även i år har vi blivit tvungna att ändra format från IRL till digitalt pga. rådande Covid situation.

Jag önskar er alla ett gott 2022!

January 2022, Uppsala

A Word from the Editors

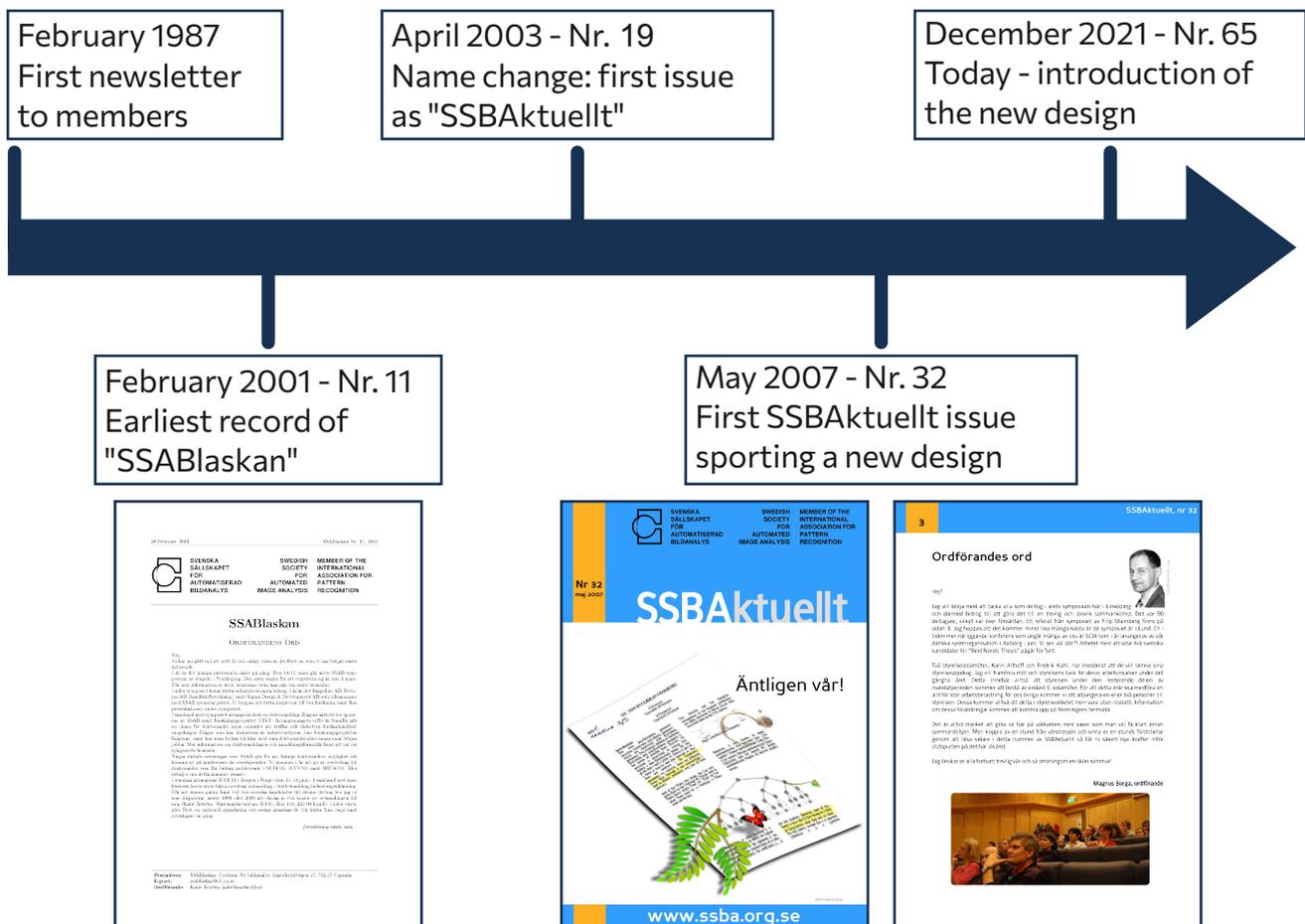
## New SSBAktuellt Design

Dear SSBA-Community,

The last SSBAktuellt design was introduced after 32 issues of the newsletter. Another 32 issues later, we felt it was time to update it again! We moved the template into the open-source software Scribus, which runs on all common operating systems, in the hopes that it will serve many following SSBA members who will join the editorial board in the future. While the looks may have changed, the newsletter will continue to feature reports on interesting conferences, summer schools, and other national and international events by other SSBA members, as well as announcements of exciting happenings throughout Sweden, upcoming conferences and courses in the field, and proudly present the newest graduate degree recipients from Swedish universities.

We hope you will enjoy this and many more future editions of SSBAktuellt! For content, suggestions and ideas for future issues, please contact us at [redaktionen@ssba.org.se](mailto:redaktionen@ssba.org.se).

Happy New Year,  
Raphaela Heil & Elisabeth Wetzer



## Infrastructure Introduction

# ENCCS - National Competence Center for Sweden is here to help you

Dr. Lilit Axner introduces the EuroCC National Competence Center Sweden.



Image: ENCCS

Are you a researcher in the need of compute time either for your simulations within the traditional disciplines or for pre- and post processing of your data or images on supercomputers? Or may be you have a company that would like to become even more competitive on the international market by using applied AI or deep learning on supercomputers and need expert help? In either way ENCCS experts are here to help academic users, industries and the public administration to utilize current and future supercomputers deployed by EuroHPC Joint Undertaking (<https://eurohpc-ju.europa.eu/>).

The EuroCC National Competence Center Sweden (ENCCS, <https://enccs.se/>) is a joint initiative between the ten main Swedish research universities and RISE Research Institutes of Sweden. The center is hosted by Uppsala University (UU) on behalf of the consortium and includes the relevant competences at the other nodes. The initiative is funded by the EuroHPC JU, Swedish Research

Council (Vetenskapsrådet) and the Swedish Innovation Agency (Vinnova). It is designed to prioritize support based on:

- 1 The access needs of academic, industrial and public administration users to supercomputers
- 2 The needs of expert help within the High Performance Computing, Artificial Intelligence (AI) and Data Analytic
- 3 The needs for training to enable a wide range of Swedish users to use the new supercomputing hardware (such as the LUMI system) deployed by Euro HPC Joint Undertaking.

You are always welcome to contact us directly to [info@enccs.se](mailto:info@enccs.se) or follow us on:

ENCCS web-portal: <https://enccs.se>

LinkedIn: <https://www.linkedin.com/company/enccs>

Twitter: [https://twitter.com/EuroCC\\_Sweden](https://twitter.com/EuroCC_Sweden)

Newsletter: <https://enccs.se/newsletter>

### The Author

**Dr. Lilit Axner**

Director of the EuroCC National Competence Center Sweden, Contact person for Sweden for the LUMI User Program and SNIC centers coordinator within PRACE Infrastructure

## Arena Report

# AIDA Update

Claes Lundström presents an update about the Analytic Imaging Diagnostics Arena (AIDA)

Analytic Imaging Diagnostics Arena (AIDA) is the national arena for innovation in AI for medical imaging. The AIDA objective is to assist triple helix collaboration between academia, healthcare and industry to translate technical advances in AI technology into patient benefit in the form of clinically useful tools.

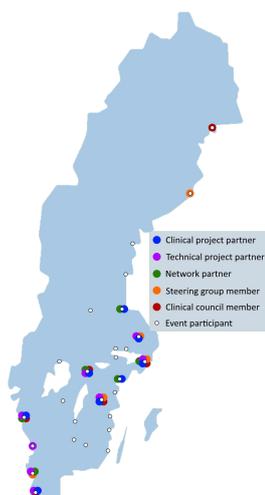


Image: AIDA

AIDA is coordinated by the Center for Medical Image Science and Visualization (CMIV) at Linköping University. AIDA is an initiative within the Strategic innovation program Medtech4Health, jointly supported by VINNOVA, Formas and the Swedish Energy Agency.

In July 2021, the home and financial support for the AIDA Data Hub (introduced below) shifted to SciLifeLab, where the Data Hub from now on is a part of the BioImage Informatics facility (BIIF) within the Bioinformatics Platform (NBIS).

While the overall vision has stayed the same since its birth in 2017, the scope of AIDA activities and resources has evolved over the years. Below, an overview of the current operations is given, including many opportunities for SSBA members interested in medical imaging applications. For more details, please refer to the AIDA website: [medtech4health.se/en/aida-arena/](https://medtech4health.se/en/aida-arena/)

### Organization

AIDA is organized as a collaboration arena, serving the innovation needs of its community of partner organizations. Currently, close to 40 organizations are formal AIDA members and in total 60+ organizations benefit from the support AIDA provides. A core part of the activities is the AIDA Days workshops organized a few times each semester, to learn about and discuss hot topics from both technical and clinical perspectives.



Image: AIDA

### Opportunities for innovators

Several support opportunities are available for efforts within the AIDA area, both in the form of funding and as unique prerequisites for method and knowledge development. A main part of AIDA is Innovation projects developing AI based decision support. They are led by research groups within industry and academia throughout the country in collaboration with

healthcare providers. The typical project has so far spanned 1 MSEK over two years, with 50% funded via AIDA. Since 2017, 35 such projects have been awarded.

One way that AIDA supports AI competence development for healthcare staff is to offer Clinical fellowships. These are practical AI efforts that are carried out with support from technical experts. Eleven such fellowships have been part of AIDA. Another possibility for competence development is the three-day course in AI that AIDA regularly offers to physicians. AIDA also supports Clinical evaluation projects, where Swedish healthcare organizations evaluate commercially available AI solutions within diagnostic imaging. The aim is to open another round of soliciting project proposals in the middle of 2022.

## Datasets shared on the AIDA Data Hub



X-ray examinations of atypical femoral fractures 2021  
Keywords: Radiology, X-ray, Annotated, Femur, AFF, Atypical femoral fracture.  
doi:10.23698/aida/affai



Axillary lymph nodes in breast cancer cases 2019  
Keywords: Pathology, Whole slide imaging, Breast, Lymph nodes, Cancer, Sentinel nodes, Immunohistochemical staining, cytokeratin, CKAE1/AE3.  
doi:10.23698/aida/brln



Computed Tomography Pulmonary Angiography (CTPA) data 2019  
Keywords: Radiology, Computed tomography, Thorax, Pulmonary embolism,

Image: AIDA

## AIDA Data Hub – data sharing and compute

The Data Hub part of AIDA offers several services to facilitate world-class research in AI for diagnostic imaging.

A key resource is the AIDA Dataset register where we help researchers share their data with the world, making high-quality datasets more FAIR and citeable using Digital Object Identifiers (DOI). We can also fund work with extracting clinically prioritized data for sharing on the AIDA Data Hub. So far 5.3TB of radiology and pathology data have been shared, in 27622 scans with 39093 annotations in 17 datasets.

AIDA also offers its members access to high-end computational resources centered around

a DGX-2 system. This is the currently largest national AI research system secured for sensitive personal data in Sweden. Much effort has been made to ensure low thresholds to get started and use the system.

Another useful resource is the AIDA Data Sharing Policy, describing how to effectively share medical imaging data for research in Sweden and similar countries, in an ethical and legal way.

## Clinical validation

The level of AI maturity has increased since AIDA started, but hardly any solutions have yet reached actual clinical use. A major obstacle is that effective methods for evaluation, validation, and monitoring are missing. Therefore, AIDA has in the fall of 2021 started a new initiative, an Incubator for national AI validation platforms. The initiative is supported by Vinnova and the resulting platforms will be governed by healthcare itself.

## Engage!

AIDA is about serving the needs of the AIDA community, thus, anyone in Sweden working to innovate within AI for medical imaging. If you have ideas on how AIDA could support your innovation ambitions, please let us know. And if you haven't been in touch with AIDA yet, we suggest that you come as guest to a couple of our workshops, to experience what the community can offer.

The Author

### Claes Lundström

AIDA Arena Director and Adjunct Professor at Linköping University, Center for Medical Image Science and Visualization

## Conference Report

# ACM International Conference on Multimodal Interaction

Marc Fraille reports on his participation at the 23rd ICMI, held in October 2021.

As someone who came to a Machine Learning PhD with no previous ML experience, much of my first year went into taking courses and learning the ropes, so it felt short of a miracle when I got a small workshop paper accepted by the end of the academic year. With it, came an opportunity to attend the main conference: ICMI 2021. With the shadow of COVID over our heads, it was unclear how the conference would take place, but raising vaccination rates and falling infection rates allowed me to hope for an in-person conference after a long year of isolation, and a chance to visit Montreal. Alas, caution won the battle, and the main conference was held as a hybrid event, with the workshops happening fully online, and I was left sitting in front of my computer in Sweden. The workshops were on Zoom, which, despite its failings, is an old friend at this point. Aside from the difficulties caused by time zone differences, they ran smoothly. The smaller form factor and the possibility to speak freely made them a welcoming space for discussion, although this was limited by tight schedules. More free-form conversation could have been good, but this is always difficult in online meetings. Seeing what came next, sticking to Zoom seems like the wiser decision. The virtual version of the main conference happened in a 3D environment by the name of Virbella, which asked me to create a simple virtual avatar before throwing me into a haphazardly put together recreation of a conference palace. The main conference hall essentially consisted of three video livestreams that could be seen and heard individually, but the voices of online speakers would overlap each other. Despite prior training for speakers and conference

organizers, nobody seemed to understand how to use the environment effectively, causing many technical problems, and delaying the start of the 1st day noticeably. Enough strange behavior was observed that the organizers shared YouTube livestream links several times as a more sane alternative to watch the in-person presentations. Outside the main hall, there were open conversation tables that nobody seemed to use, and virtual poster sessions that did not seem to perform much better. Luckily, the content of the conference provided a much better experience than the means of delivery. The keynotes allowed more veteran researchers to overview the research done by their teams and the state of the field, while the paper presentations offered a good variety of topics, including technical research and user studies. With a single track mixing in-person & virtual speakers, I could sit down and enjoy 3 days worth of innovation. I still hope in-person conferences will return soon. For some of us, the online environment is just too awkward to allow good conversation to happen, and at the end of the day, those free-form discussions are the fertile ground where our best ideas grow. In the meantime, I will happily listen to your presentation from my screen, with a warm cup of tea in my hand.

## The Author

Marc Fraille, Ph.D. student at Uppsala University, conducting research at the Uppsala Social Robotics Lab and the Methods for Image Data Analysis (MIDA) group in developing explainable AI (XAI) methods.



## Conference Report

# ICDAR 2021 EISLAB ML LTU Contribution

Konstantina Nikolaidou reports on the involvement of the EISLAB Machine Learning group in the organisation of the 16th edition of ICDAR, which took place in September 2021.



Photo: Leo Burgy

2020 was challenging for the research community, as the Covid restrictions did not allow physical events and traveling. And even in 2021 the world could not yet open up. Fortunately, hybrid international events were possible at certain times up to certain sizes. One of these events was ICDAR 2021: [The 16th International Conference on Document Analysis and Recognition \(ICDAR\)](#) is the premier international event for scientists and practitioners involved in document analysis and recognition, a field of growing importance in the current age of digital transition. The conference took place in Lausanne, Switzerland, in September 2021 and provided a hybrid mode for both online and onsite participation.

The [EISLAB Machine Learning group](#) of Luleå University of Technology had an active

contribution throughout the whole conference organization. Marcus Liwicki, head of EISLAB Machine Learning and Vice-Rector of Applied Artificial Intelligence at Luleå University of Technology, was one of the general chairs, together with Rolf Ingold and Andreas Fischer from the University of Fribourg. Foteini Simistira Liwicki, Senior Lecturer at EISLAB ML, further contributed as competition chair. The event had 200 onsite and 400 online participants. The main conference took place at the Beaulieu convention center in Lausanne, where Imavox provided professional support.

The EISLAB ML team from Luleå University of Technology was responsible for the hybridization format during the pre-conference hosted at EPFL. It was a natural choice, since LTU has a long standing experience in hybrid events and organized

already hybrid lectures and conferences decades before the Covid-19 pandemic started. The hybridization team comprised of 10 volunteers that were involved physically or online, named alphabetically: Nosheen Abid, Oluwatosin Adewumi, Pedro Alonso, Sana Sabah Sabry Al-Azzawi, Prakash Chandra Chhipa, Saleha Javed, György Kovács, Hamam Mokayed, Konstantina Nikolaidou, and Rajkumar Saini. The sessions worked smoothly while participants and organizers gave a lot of positive feedback and appreciation about the group's motivation and support. The positive spirit and flexibility of the whole organization

made the event possible and connected researchers worldwide to empower the field in these challenging conditions. Especially online participants had a fair chance to engage, not only in the main sessions, but also during social activity and side discussions.

The Author

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

## Summer School Report

# 4th IAPR TC 10/11 Summer School on Document Analysis

Nosheen Abid reports on the IAPR Summer School on Document Analysis, which was held in hybrid form in August 2021 at Luleå Tekniska Univer

The 4th IAPR TC 10/11 Summer School on Document Analysis with the theme “digital transformation in a changing world” was held at Luleå tekniska universitet (LTU), Sweden from 23rd to 27th of August 2021. The summer school is an official IAPR event, endorsed by IAPR TC-10 (Technical Committee on Graphics Recognition) and IAPR TC-11 (Technical Committee on Reading Systems). This is a premier bi-annual summer school focused on recent developments in document analysis. It has gathered leading researchers and scientists in emerging areas of document analysis to give in-depth and objective exposure to the participants.

SSDA (Summer School on Document Analysis) 2021 took place in hybrid form, allowing participants from all areas in the world (depending on the current Corona restrictions)

to participate either virtually or physically in Luleå. Eleven (11) international speakers participated in SSDA 2021 from Sweden, Germany, Switzerland, Spain, Pakistan, and the USA. 65 (22 Onsite, 43 Online) participants from 12 different countries attended SSDA 2021. A large number of participants (31) were granted scholarships, to facilitate participation from low/lower-middle income country participants. LTU built on our long-standing experience in distance education and conferences in Luleå and the northern region, following effective teaching and learning pedagogical principles.

The school's objective was to provide participants with several aspects related to the digital transformation of documents and beyond. All the latest research being carried out in document understanding, document

(image) analysis, natural scene text detection and recognition, historical document analysis, Covid-19, virtualization, and new topics were covered in the school. The summer school provided an excellent opportunity for participants to expand their knowledge and skills by linking the theory with the actual implementation. SSDA 2021 invited [speakers](#) from different areas of expertise to enrich the overall impact of the school.

Significant Highlights of the school:

- Expert's talk on document understanding, document (image) analysis, natural scene text detection and recognition, historical document analysis, Corona and Virtualization, and other new topics.
- Field experts provided tutorial-based lectures and hands-on laboratory sessions.
- Partial scholarships for selected international students
- Hackathon Competition sponsored by Wacom Ltd.

You can read more about the 4th IAPR TC 10/11 Summer School at:

<https://www.ltu.se/research/subjects/Maskininlarning/SSDA-2021?l=en>



Photo: Marcus Liwicki

Host Chair and Advisor: [Marcus Liwicki](#), LTU.  
General Executive Chairs: [Hamam Mokayed](#), LTU, and [Rajkumar Saini](#), LTU.

Local Organizing Committee: [Nosheen Abid](#), LTU, [Konstantina Nikolaidou](#), LTU, and [Richa Upadhyay](#), LTU.

The Author

**Nosheen Abid**

PhD student in Machine Learning,  
Luleå university of Technology

## Announcement

# Nordic DAIR Award for Stora Enso's Computer Vision Platform

Stora Enso has been awarded the 2021 Nordic Data, Analytics and AI Readiness awards for their computer vision platform.

Read more about the award here:

<https://hyperight.com/organisation-categories/>

Congratulations to Stora Enso and especially Anindya Gupta - our former UU PhD and PostDoc colleague and the lead designer behind the award winning Computer Vision platform!

## Announcement

# ELLIIT Linköping-Lund excellence centre

ELLIIT är ett nätverk finansierat av svenska staten för forskning inom informationsteknologi och mobil telekommunikation. ELLIIT startade 2010, och år 2020 fick ELLIIT ett substantiellt budgetpåslag, och forskningsbudgeten ligger för närvarande på 100 MSEK/år, fördelat över partneruniversiteten, LiU, LU, och till en mindre del även BTH och HH.

Den årliga ELLIIT-workshopen hölls i år 26-27 oktober, på plats i Lund.

Här presenterades ett flertal nya och pågående projekt relaterade till bildanalys.

Bl.a.

1 Embodied Visual Active Learning, PI Kalle Åström (LU) och co-PI: Christian Sminchisescu (LU)

2 Local Positioning Systems, PI: Kalle Åström (LU), co-PI: Fredrik Gustafsson (LiU); med Magnus Oskarsson (LU), Bo Bernhardsson (LU), Fredrik Tufvesson (LU), Gustaf Hendeby (LiU), Isaac Skoog (LiU)

3 Geometrically Constrained Learning for Vision, PI: Michael Felsberg (LiU), co-PI: Anders Heyden (LU); med Mårten Wadenbäck (LiU)

4 Situation Aware Perception for Safe Autonomous Robotics Systems, Volker Krueger, (LU) och Per-Erik Forssén, (LiU)

Dessa projekt finansierar antingen en gemensam postdok eller en doktorand på respektive lärosäte. Mer detaljer om projekten finns att läsa på ELLITs hemsida:

<https://ellit.se>

## Announcement

# New Graduate School in Data-Intensive Science

The eSENCE and SciLifeLab Uppsala nodes start a new interdisciplinary graduate school to address challenges in data-intensive science. The school addresses the challenge of data-intensive science both from the foundational methodological perspective and from the perspective of data-driven science applications. The school should be an arena where experts in computational science, data science and data engineering (systems and methodology) work closely together with researchers in (data-driven) sciences, industry and society to accelerate data-intensive scientific discovery. The school should work

actively to create synergies between the involved Strategic Research Initiatives (SRAs), add complement related strategic initiatives at the university and nationally, as well as actively encouraging collaboration with industry and society.

48 project proposals were submitted from which up to 10 will be selected. Selected projects will recruit PhD students to start late 2021 or early 2022.

For more information visit:

<https://bit.ly/3mrV87I>

## 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](mailto: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](mailto:secretariat@iapr.org)). A PDF attachment containing all the required information is appreciated

**More information:**

[iapr.org/conferences/summerschools.php](http://iapr.org/conferences/summerschools.php)

Deadline: February 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.

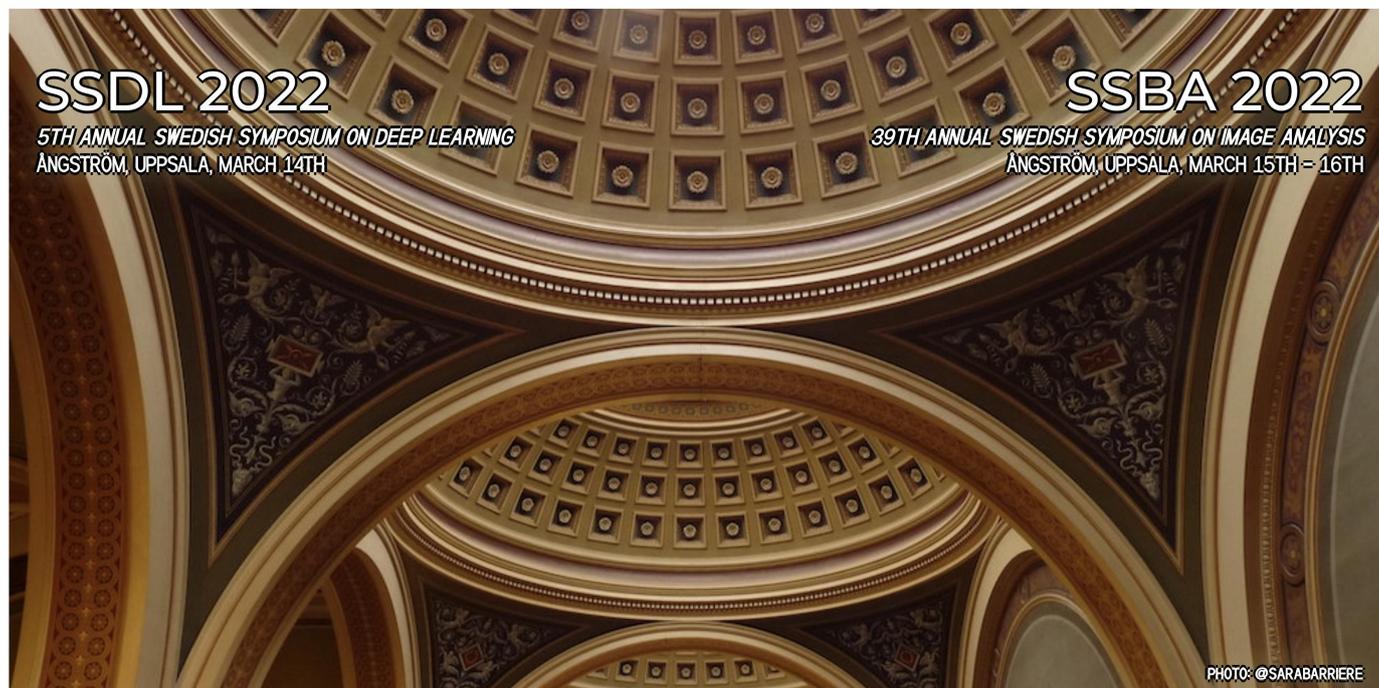
Contact information: Bob Fisher, Chair IAPR-Industrial Liaison Committee, [rbf@inf.ed.ac.uk](mailto:rbf@inf.ed.ac.uk)

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

## Conference Announcement

# SSBA + SSDL 2022

Welcome to the Swedish symposia on deep learning and image analysis!



Due to the pandemic, the symposium can not be held on site in Uppsala, but will be a virtual event. Participation will be free-of-charge for all.

SSDL is an important Swedish forum for leading research groups in industry and academia to meet and discuss the latest trends and developments in deep learning and related areas. SSDL 2022 will feature invited talks by leading researchers in deep learning as well as oral and poster presentations of submitted papers and abstracts.

The SSBA symposium is the premier Swedish event where researchers, industrial professionals and students gather to learn about the recent developments in the areas of image processing, computer vision, pattern recognition and related fields. SSBA 2022 features keynote speakers and oral presentations and posters of submitted papers.

SSDL/SSBA 2022 is organized by the institution for Visual information and Interaction at Uppsala University, and Swedish Society for Automated Image Analysis (SSBA).

More information:

<http://ssba.org.se/ssba2022/>

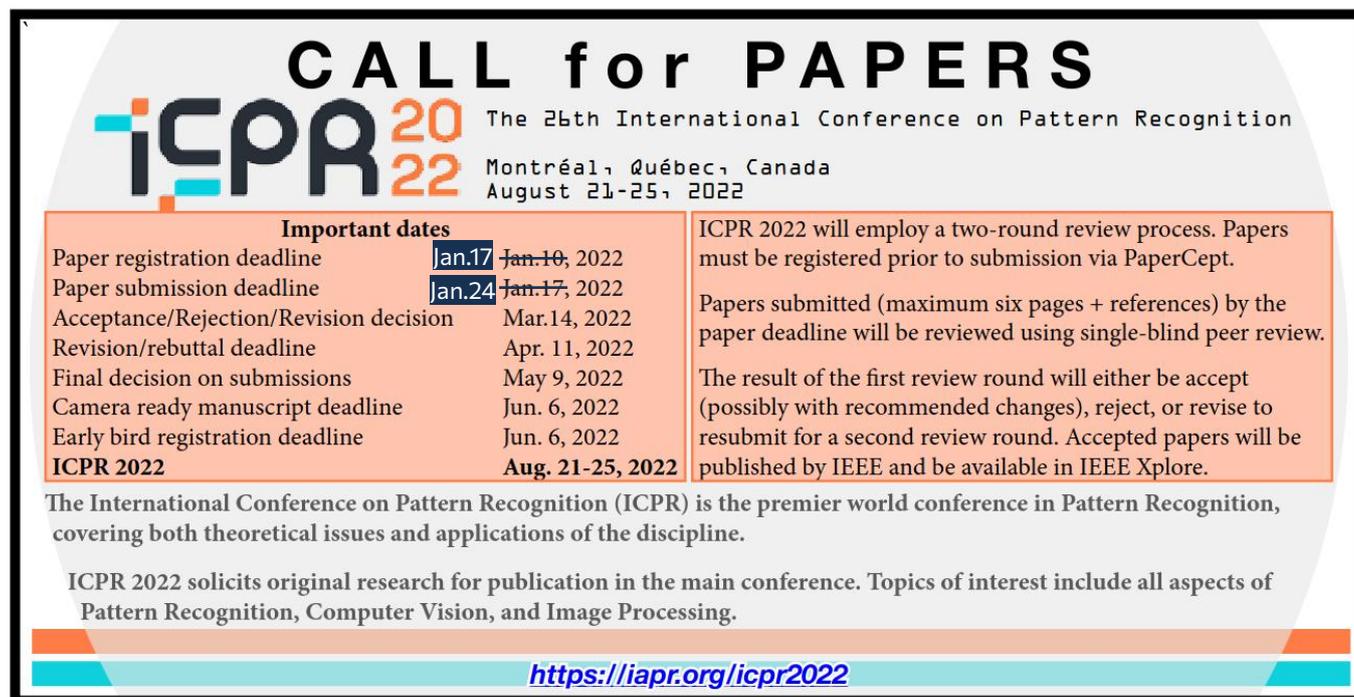
## IMPORTANT DATES

Deadlines	
SSBA paper submission deadline	20th February 2022
SSDL abstract/paper submission deadline	20th February 2022
Registration deadline	27th February 2022
Conference dates	
Deep Learning Symposium (SSDL)	14 March 12.00-18:00
Image Analysis Symposium (SSBA)	15 - 16 March

## Conference Announcement

# ICPR 2022

Extended deadlines at the International Conference on Pattern Recognition!



**CALL for PAPERS**  
The 26th International Conference on Pattern Recognition  
Montréal, Québec, Canada  
August 21-25, 2022

**Important dates**

Paper registration deadline	<del>Jan. 10</del> <b>Jan. 17</b> , 2022
Paper submission deadline	<del>Jan. 17</del> <b>Jan. 24</b> , 2022
Acceptance/Rejection/Revision decision	Mar. 14, 2022
Revision/rebuttal deadline	Apr. 11, 2022
Final decision on submissions	May 9, 2022
Camera ready manuscript deadline	Jun. 6, 2022
Early bird registration deadline	Jun. 6, 2022
<b>ICPR 2022</b>	<b>Aug. 21-25, 2022</b>

ICPR 2022 will employ a two-round review process. Papers must be registered prior to submission via PaperCept.

Papers submitted (maximum six pages + references) by the paper deadline will be reviewed using single-blind peer review.

The result of the first review round will either be accept (possibly with recommended changes), reject, or revise to resubmit for a second review round. Accepted papers will be published by IEEE and be available in IEEE Xplore.

The International Conference on Pattern Recognition (ICPR) is the premier world conference in Pattern Recognition, covering both theoretical issues and applications of the discipline.

ICPR 2022 solicits original research for publication in the main conference. Topics of interest include all aspects of Pattern Recognition, Computer Vision, and Image Processing.

<https://iapr.org/icpr2022>

**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

Outlook 2022

## Upcoming Conferences



### JANUARY

Winter Conference on Applications of Computer Vision (WACV 2022)

<https://wacv2022.thecvf.com/home>

Jan 03-08, 2022 - Waikoloa, Hawaii, US

International Seminar on Machine Learning, Optimization, and Data Science (ISMODE)

<https://ismode.unkris.ac.id>

Jan 29-30, 2022 - Jakarta, Indonesia

### FEBRUARY

11th Intl. Conf. on Pattern Rec. Applications and Methods (ICPRAM 2022)

<http://www.icpram.org>

Feb 03-05, 2022 - virtual

International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISAPP)

<https://visapp.scitevents.org>

Feb 06-08, 2022 - virtual

2nd International Conference on Artificial Intelligence and Signal Processing (AISP)

<https://www.aisp.in>

Feb 12-14, 2022 - virtual

SPIE Medical Imaging

[spie.org/conferences-and-exhibitions/medical-imaging](https://spie.org/conferences-and-exhibitions/medical-imaging)

Feb 20-24, 2022 - San Diego, California, US

12th Iranian/Second International Conference on Machine Vision and Image Processing

<http://mvip2022.ismvipconf.ir>

Feb 23-24, 2022 - Ahvaz, Iran

### MARCH

7th International Conference on Data Science and Machine Learning Applications (CDMA)

<http://ieeepsu.org/cdma/>

March 01-03, 2022 - Riyadh, Saudia Arabia

17th ACM/IEEE International Conference on Human-Robot Interaction (HRI)

<http://humanrobotinteraction.org/2022/>

March 07-10, 2022 - virtual

1st Conference on Artificial Intelligence Trends and Pattern Recognition (ICAITPR)

<https://www.icaitpr.org>

March 10-12, 2022 - Hyderabad, India

2nd International Conference on Image Processing and Robotics (ICIPRob)

<http://www.iciprob.com/2022/>

March 11-13, 2022 - virtual

SIAM Conference on Imaging Science

<https://www.siam.org/conferences/cm/conference/is22>

March 22-25, 2022 - virtual



## Swedish Deep Learning Symposium

<http://ssba.org.se/ssba2022/>

March 14, 2022 - Uppsala, Sweden

## Swedish Image Analysis Symposium (SSBA)

<http://ssba.org.se/ssba2022/>

March 15-16, 2022 - Uppsala, Sweden

## 2nd International Conference on Intelligent Systems and Patterns Recognition (ISPR)

<https://ispr2022.sciencesconf.org>

March 24-26, 2022 - Hammamet, Tunisia

## Intl. Symposium on Biomedical Imaging (ISBI)

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

March 28-31, 2022 - Kolkata, India

## APRIL

### IEEE 15th Pacific Visualization Symposium (PacificVis)

<http://pvis.org>

April 11-14, 2022 - Tsukuba, Japan

### IEEE Asia-Pacific Conference on Image Processing, Electronics and Computers (IPEC)

<http://ipecc.iaast.cn>

April 14-16, 2022 - Dalian, China

### 10th Intl. Conf. on Learning Representations (ICLR 2022)

<https://iclr.cc>

April 25-29, 2022 - virtual

## MAY

### 15th IAPR Intl. Workshop on Document Analysis Systems (DAS 2022)

<https://das2022.univ-lr.fr>

May 22-25, 2022 - La Rochelle, France

## JUNE

### 3rd Intl. Conf. on Pattern Rec. and AI (ICPRAI)

<https://icprai2022.sciencesconf.org/>

June 01-03, 2022 - Paris, France

### Int. Society for Photogrammetry and Remote Sensing Congress (ISPRS)

<https://www.isprs2022-nice.com>

June 06-11, 2022 - Nice, France

### 20th Conf. of the Intl. Graphonomics Society (IGS 2021)

<https://graphonomics.net/igs2021/>

June 07-09, 2022 - Gran Canaria, Spain

### 12th International Conference on Pattern Recognition Systems (ICPRS 2022)

<http://s836450039.websitehome.co.uk/icprs22/>

June 07-10, 2022 - virtual

### CVPR 2022

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

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

## AUGUST

### 26th Intl. Conf on Pattern Rec. (ICPR)

<https://www.icpr2022.com>

Aug 21-25, 2022 - Montréal, Canada

Outlook 2022

## Summer/Winter Schools 2022

Winter School on Image Analysis for Plant Phenotyping

<https://www.wur.nl/en/show/Winter-School-on-Image-Analysis-for-Plant-Phenotyping.htm>

Feb 7-11, 2022 - Wageningen University & Research, Netherlands

Theory meets Practice: Photogrammetric Image Processing with MicMac & Point Cloud Processing with OPALS

<https://www.isprs2022-nice.com/index.php/summer-school/>

June 06-11, 2022 - Nice, France

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

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

Heidelberg Laureate Forum

<https://application.heidelberg-laureate-forum.org/site/index.php>

September 18-23, 2022 - Heidelberg, Germany

Announcement

## Soapbox Science Speaker Call



### Speakers wanted for Soapbox Science event

Join top female scientist as they take science to the streets!

#### Aim

To bring cutting edge science to the public, in an accessible, fun and unthreatening way.

#### How?

Stand on a wooden box and speak directly with the audience about your exciting research.

#### When and where?

Saturday, 21 May 2022, in central Uppsala.

For more information, please visit [www.u-share.se/events](http://www.u-share.se/events)



U-Share



Engage the public with your research and inspire the next generation.

The main aim of Soapbox Science is to interact with people that have not necessarily planned to come and learn about science. This can hopefully inspire people who never normally get exposed to science.

Female scientists in any stage of their career are encouraged to apply directly as a speaker at: <http://soapboxscience.org/>

Announcement

## Aktuella Avhandlingar

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



### Doktorsavhandlingar

**Felix Järemo Lawin**

Linköpings Universitet

[Learning Representations for Segmentation and Registration](#)

**Marco Domenico Cirillo**

Linköpings Universitet

[A path along deep learning for medical image analysis - With focus on burn wounds and brain tumors](#)

### Licentiatavhandlingar

**Karl Bengtsson Bernander**

Uppsala Universitet

[Improving training of deep learning for biomedical image analysis and computational physics](#)