

Dansk Selskab for Automatisk Genkendelse af Mønstre (DSAGM) – 50th Anniversary 1976-2026

Dansk Selskab for Automatisk Genkendelse af Mønstre (DSAGM) – The Danish Pattern Recognition Society was formed in 1976 such that it could be among the first national societies to join the International Association of Pattern Recognition (IAPR) in 1978.

I. Formation of DSAGM in the 1970s

The idea of the International Association of Pattern Recognition (IAPR) was formed following the Second International Joint Conference on Pattern Recognition held in 1974 at the Hotel Eremitage a short distance from the newly inaugurated campus of the Technical University of Denmark in Kongens Lyngby 10 km north of Copenhagen.

IAPR is celebrating its 50th anniversary after the first International Joint Conference on Pattern Recognition (IJCPR) held in 1973 in Washington, D.C., the drafting of its constitution in 1974-1976, the adoption of its bylaws in 1976-1977, and the formal inauguration at the beginning of 1978. Denmark's "*Dansk Selskab for Automatisk Genkendelse af Mønstre*" together with Finland's "*Suomen Hahmontunnistustutkimuksen Seura*" and Germany's "*Deutsche Arbeitsgemeinschaft für Mustererkennung*" were the first societies to apply for membership in the autumn of 1977.

Professor P. W. Becker (cf. page 8) from the Technical University of Denmark (DTU) participated in the first IJCPR in Washington, D.C. in 1973 and he was the local arrangements chair of the second IJCPR in Copenhagen, August 13-15, 1974. The conference venue - the Hotel Eremitage in Kongens Lyngby – was named after the royal hunting castle in the neighbouring historical parforce hunting grounds. Also nearby was the new campus of professor P.W. Beckers university. DTU was founded in 1829 and had had several addresses in the center of Copenhagen. However, in 1958 the Danish parliament responded to a need for expansion of the engineering educations and research programmes to support industrial development and export and approved plans for the relocation of the university to a new campus in Kongens Lyngby. After years of planning and building and moving the new and modern campus was inaugurated on May 17th 1974¹.

Following the plans for IAPR, professor Becker took the initiative to the formation of DSAGM – the Danish Pattern Recognition Society. He served as its president from the beginning until 1989. During that period he also served a treasurer of IAPR in 1978-1980.



Fig. 1 Plan of the Technical University of Denmark 1974. Note the stringent orthogonal structure

II. National consolidation and Scandinavian coordination in the 1980s

As mentioned, the Danish and Finnish pattern recognition societies were among the first applicants to join IAPR. The Swedish society "*Svenska Sällskapet för Automatiserad Bildanalys*" (SSAB later renamed SSBA) also joined in 1978. The three societies reported 41, 34, and approx. 100 members

¹ Nils Koppel, Ole Nørgård, H. Peschardt-Hansen og B.J.Rambøll, *DtH/DIA*, 17.maj 1974.

to IAPR². The founder and first president of the Swedish society was Thorleif Orhaug who was head of the research unit at the Swedish Defence Research Institute in Linköping where he worked with remote sensing techniques, and the founder and first president of The Finnish society was professor Teuvo Kohonen from Helsinki University of Technology. Helsinki University of Technology was later merged with other institutions to become Aalto University.

Already in 1980 these three societies took the initiative to the Scandinavian Conference on Image Analysis (SCIA) series, thus making SCIA one of the first and longest living conferences series in the world dedicated to image analysis and computer vision. The first SCIA was held in Linköping in Sweden in 1980, the second in Espoo, Finland in 1981, and the third in Copenhagen in 1983. At the second SCIA Kohonen presented some of his first work on the famous Kohonen self organising neural networks. In 1984 the Norwegian society "*Norsk Forening for Bildebehandling og Maskinlæring*" (NOBIM) was formed with Ivar Austvoll as its first president. NOBIM joined IAPR and then SCIA, just in time for organizing the fourth SCIA in Trondheim, Norway in 1985.

The third SCIA in 1983 had as the 2nd IJCPR the Hotel Eremitage in Kongens Lyngby as its venue. In the executive committee in addition professor Becker two new Danish names appear, namely Erik Granum (cf. page 9) and Peter Johansen (cf. page 9). Both had as young researchers been employed at DTU, and they continued to lead activities in image analysis and computer vision at Aalborg University (AAU), that was founded in 1974, and at the Department for Computer Science at the University of Copenhagen (DIKU). DIKU was founded as the first computer science department in Denmark in 1970 on the initiative of professor Peter Naur. Professor Naur coined the Danish term *datalogi* for "the science of the nature and use of data" as the foundation of DIKU. In 2005 he received the Turing award for his foundational work on ALGOL 60, compiler design, and programming practices. Erik Granum was inspired by Annelise Rosenfalck (cf. page 9) the first female electrical engineer educated in Denmark at DTU in 1947 and a pioneer in biomedical engineering - who had already established herself as a professor at Aalborg University. Granum and Johansen were both co-founders of DSAGM. In 1989 Knut Conradsen (cf. page 9) became president of DSAGM. He began as a faculty member at the Institute for Mathematical Statistics and Operations Research at DTU in 1970.

The image analysis groups formed in the beginning of the 1980s at the Technical University of Denmark at the Institute for Mathematical Statistics and Operations Research (IMSOR) led by Knut Conradsen; at the University Copenhagen in the Department for Computer Science led by Peter Johansen; and at Aalborg University in the Laboratory for Image Analysis in the Department for Electronic Systems led by Erik Granum have been at the core of the DSAGM. It is noteworthy that the three group founders came into the field from different disciplines, namely statistics, computer science, and electrical engineering.

For 1985-1990 the Danish research council had prioritized "*Image Analysis, Computer Vision, and Robotics*". The three groups formed the Danish Image Analysis Consortium ("*Dansk Billedbehandlingskonsortium DB-K*") in 1988 and were funded by the research council. Moreover, in 1989 the AAU and DTU groups were funded by the research council to support industry with the project "*Modular operational imaging systems*" (MOBS).

Image analysis and computer vision were always limited by computing power³. The Swedish company Contextvision founded in 1983 as a spin-out of activities at Linköping University manufactured a general operator processor allowing for among other procedures fast image

² IAPR Newsletter 1978, Vol. 1(1), August 1978.

³ Bengtsson, E. (2017). Image Processing and Its Hardware Support Analysis vs Synthesis - Historical Trends. In: Sharma, P., Bianchi, F. (eds) Image Analysis. SCIA 2017. Lecture Notes in Computer Science, vol 10269. Springer.

convolution with large filter kernels. The AAU and DTU as part of the MOBS project acquired Contextvision GOPs that benefitted their research significantly.

Also, as part of MOBS a series of biennial industrial vision day series were organised. After the MOBS project the Vision Days continued under DSAGM auspices until 2019. For three decades the Vision Days were an important Danish forum for academic-industrial interchange in the field of image analysis and computer vision and later also with special sessions for medical image analysis and computer graphics. Early and still existing Danish image analysis/computer vision companies begun outside the academic environments such as JLI Vision by Jørgen Læssøe and Imagehouse by Hans Steenstrup supported and continue to support DSAGM activities.

In terms of Scandinavian collaboration the SCIA conference series continued with solid Danish and DSAGM participation in the conferences in Saltsjöbaden, Sweden in 1987 and Oulu, Finland in 1989.

III. Scandinavian and European immersion in the 1990s

In 1989 Knut Conradsen had become president of DSAGM. Among those also elected to the board in the 1990s were Henrik I. Christensen (cf. page 10) and Ole Vilhem Larsen from AAU, Peter Johansen, and Søren I. Olsen (cf. page 12) from DIKU, and Bjarne Kjær Ersbøll (cf. page 10) from DTU.

In 1991 DSAGM hosted SCIA in Aalborg. Erik Granum. AAU was the general chair and Henrik I. Christensen, AAU was the local arrangements chair. The following SCIAs were in Tromsø in Norway and included a visit to Spitzbergen and the North Cape; in Uppsala in Sweden in 1995; in Lappeenranta in Finland in 1997; and again hosted by DSAGM in Kangerlussuaq, Greenland in 1999.

Also in 1991-1995 a series of the leading image analysis groups from the Scandinavian universities participated in a joint doctoral network program NORVIC, “Nordic Research Network in Computer Vision” funded by the Nordic Academy for Advanced Study (NorFA) under the Nordic Council. Henrik I. Christensen from AAU organised a Nordic Summer School on “*Active Vision and Geometric Modelling*” held in Rebild Bakker south of Aalborg. The NORVIC programme also included Ph.D. student exchange and Rasmus Larsen (cf. page 10) from DTU spent the summer in 1992 at the Computer Vision Laboratory at Linköping University as the guest of Gösta Granlund and Hans Knutsson.

The AAU, DTU and DIKU groups also formed the National Vision Programmers Workbench (VIPWOB) group, that developed generic software application architectures for image analysis and computer vision. VIPWOB was led by Henrik I. Christensen from 1990 to 1993.

In 1992 DSAGM began the annual national conference series “the Danish Conference on Pattern Recognition and Image Analysis – DANKOMB” organized in conjunction with the DSAGM annual meeting. This meeting was always held at the Department of Computer Science (DIKU) at the University of Copenhagen in the UP2 auditorium. This auditorium had a past as an anatomical theater used for teaching anatomy allowing students to follow dissections at a central table from tiered seating structure. This series continued until 2006. The proceedings were published in the DIKU technical report series.

The Danish image analysis groups had been early participants in the European framework programs. In the 1990s three industrial and computer vision projects were particularly important for the continuing research. AAU (Erik Granum and Henrik I. Christensen) participated in the VAP “Vision as Process” I and II EU Esprit projects 1989-1992 and 1992-1995 with five other European Universities including Linköping University (professor Gösta Granlund) and the Royal Institute of

Technology (professor Jan-Olof Eklundh) in Sweden and University of Surrey (professor Josef Kittler - President of the IAPR during 1994-1996). The overarching topic was perceptual control for dynamic vision systems. Several innovations came out of this and Henrik I. Christensen was launched on an impressive international career including serving as an advisor to the president of the USA Barack Obama on robotics.

At DTU the EU Esprit project CATIE "*Colour and texture inspection equipment*" was funded in 1996-99. Project partners included Scandinavian partners University of Oulu (professor Olli Silvén) and VTT Technical Research Centre of Finland. This project dealt with industrial inspection of three challenging inline cases: hot steel strip, wood slabs, and coffee beans. Line scan cameras were used to implement low delay imaging systems with only a few tens of milliseconds from imaging to decision for the three participating industries during the project. This contributed to setting new standards for what could be achieved in industrial visual inspection. The DTU project leader Jens Michael Carstensen went on to form a successful company Videometer aiming at custom-made vision systems for in-line and on-line quality control. Today Videometer is a leading provider of spectral imaging solutions worldwide, selling both spectral imaging instruments and custom-made vision systems.

In 1999 DSAGM was again hosting SCIA. The venue was extraordinary as the conference was held in Kangerlussuaq, Greenland. The conference chairs were Bjarne K. Ersbøll from DTU and Peter Johansen from DIKU. Greenland is one of the three countries making up the Kingdom of Denmark and had also been a research object in terms of remote sensing for minerals, climate etc. The venue was at the previous US military base established there during the second world war and the lecture hall was in the former base movie theater. The conference had a record participation, and many participants enjoyed the social events and pre- and post-conference tours to the inland ice, the Disko Bay and the Kangerlussuaq (Søndre Strøm) Fjord. Weather in Greenland means that flights are regularly cancelled and postponed. Travelers will therefore often have layovers in Kangerlussuaq. During SCIA this happened to the then most well-known and popular Greenlandic singer and songwriter Rasmus Lyberth – also known as the "big voice" of Greenland. As it happened his layover coincided with the SCIA conference dinner and Rasmus Lyberth cordially agreed to entertain the SCIA participants.

At the Department for Computer Science at the University of Copenhagen the research focus of theoretical and algebraic contributions to computational vision had led to major efforts in coding, regularization, and Gaussian scale space theory. Combined with a focus on international collaboration DIKU was established as a leading center for theoretical computer vision research in Europe. DIKU had an impressive list of short term and long term visitors that were leading scientists in these fields. One of the most frequent visitors in the 1980s and the beginning of the 1990s was professor Ruzena Bajcsy from UC Berkeley. Mads Nielsen (cf. page 10) had obtained his PhD degree from DIKU in 1995 and in 1999 he became the second employee after the university rector and first faculty member at the newly established IT-University of Copenhagen. At ITU he established a new image analysis group continuing the theoretical work and with a strong effort in medical image analysis.

IV. International scientific and industrial leadership in the 2000s

Knut Conradsen continued as DSAGM president throughout the decade. New board members included Jon Sporring (cf. page 11) from DIKU, and Claus Brøndgaard Madsen (cf. page 11) from AAU.

The SCIA conference continued as an important biannual event for the Danish groups and an occasion to meet Scandinavian colleagues. In 2001 in Bergen, Norway; in 2003 in Göteborg,

Sweden; in 2005 in Joensuu in Finland; in 2007 in Aalborg, Denmark; and in 2009 in Oslo, Norway.

In the 2000s Copenhagen was the venue for a couple of the leading image analysis and computer vision conferences. First in 2002 the European Conference on Computer Vision was held at the Confederation of Danish Industry on the City Hall Square. The conference was organized by the IT University of Copenhagen (Mads Nielsen), the University of Copenhagen (Peter Johansen), and Lund University (Anders Heyden and Gunnar Sparr). Bjarne Ersbøll, DTU was the industrial exhibition chair. The conference dinner was held at the modern art museum Louisiana in Humlebæk. The conference took place during the FIFA football world championships and fortunately for those such inclined there was big screen viewing at the City Hall Square.

The second international conference was the Medical Image Computing and Computer Assisted Intervention - MICCAI in 2006. This time the organizing universities were the IT-University (Mads Nielsen), The University of Copenhagen (Jon Sporring) and the Technical University of Denmark (Rasmus Larsen). The Conference was held in the concert hall in the Tivoli Gardens.

Medical image analysis has since the beginning of DSAGM been a favored application area for the image groups in Denmark. There are particular good reasons for this given the Danish social security number registrations that since 1972 links patients records and data with socio-economic data and environmental exposure in the entire population and furthermore the implementation of the PKU (Phenylketonuria) heel prick test that was implemented for all newborns in Denmark from 1975, which means that Denmark has more than 50 years of blood samples from the entire population born in Denmark that can be gene-sequenced. In the early days of DSAGM Erik Granum worked in his Ph.D. project on automated human cytogenetics analyzing images of chromosome pairs. In 1978 Becker and Granum organized the 1978 European Workshop on Automated Human Cytogenetics at Hotel Eremitage in Lyngby. Later other 2D medical image problems including histopathology images including PAP smears, fundus images of the eye retinas, and 2D radiographs were addressed. Bjarne K. Ersbøll organized a series of fundus image workshops CAFIA I-III beginning in the late 1990s

At the turn of the millennium a number of these applications had reached a maturity such that commercial solutions could be offered and a series of still existing companies were started/spun-out from DTU including Visiopharm (histopathology), Pronosco/Visiana (2D radiographs for growth and osteoporosis assessment), and Torsana Diabetes Diagnostics/Retinalyze (fundus image analysis).

Another research track that gained momentum in this decade was the joint use and design of advanced computer vision systems and advanced algorithms for solving vision tasks. This included the use of time-of-flight cameras for tracking of humans, event based cameras, stereo vision, and gaze tracking using NIR illumination, and hyperspectral imaging systems and illumination setups for separating specular reflections from color measurement/sub-surface scattering. In this relation, the world dominant Danish hearing aid industry initiated around this time completely-in-the-ear-canal hearing aids in custom made shells fitted to individual patients. This enabled a business opportunity for computer vision systems with advanced software for 3D surface scanning of impressions of ear canals or direct scanning in the ear canal for subsequent 3D printing of hearing aid shells. 3shape was a DTU spin out company that seized this opportunity and later captured a sizable part of the world market for 3D surface scanning of dental crowns. The company today has more than 2,500 employees.

In Aalborg the rise of the medical image analysis activities prompted a split of the Laboratory for Image Analysis in a group in the Department of Architecture, Design, and Media Technology led

by Thomas Moeslund (cf. page 11) and a group in the Department for Health Science and Technology led by Lasse Østergaard. While the latter group kept focusing on medical applications the former group focused on industrial applications and motion analysis – especially motion of people. In Copenhagen large parts of the ITU group returned to DIKU in 2007 and the remaining activities continued under the leadership of Dan Witzner Hansen (cf. page 11).

In this decade at the groups at AAU, DIKU, and DTU activities in 3D medical image analysis and collaboration with radiology departments, MR-departments, and clinical researchers expanded very much. This led to spin-out related to the DIKU group of Biomediq (2D/3D mammogram analysis) and Cerebiu (MR brain image analysis).

In this period funding for application of image analysis and computer vision was plentiful. In order to keep a focus on the fundamental research the group leaderships in 2009 took the initiative to a DSAGM PhD summer school series – the DTU/DIKU Summer School. Since the beginning Rasmus R Paulsen from DTU has been a main organizer of the summer school. AAU students participated from the beginning and later AAU joined the organization. The summer school is held annually in the third week of August. It is for Ph.D. students, postdocs, and faculty. From the beginning the summer schools were held in Danish islands to discourage participants from going to and from the program. The first venue was the Island of Hven in Øresund. Later the school came to Bornholm, Iceland (not a Danish island), Ærø, and Langeland. The summer school has replaced the DANKOMB/DSAGM annual conference as the recurring annual national academic meeting point and attracts well over 100 participants every year.

DSAGM organized SCIA in 2007 in Aalborg. All the Danish groups had significant computer graphics activities at this time exploiting the common geometry considerations of computer graphics and computer vision and transferring also modelling of light-matter interaction. Particularly, at this SCIA there was a strong computer graphics track. Peter Johansen was the general chair, Bjarne Ersbøll the program chair, and Claus Brøndgaard Madsen the local arrangements chair. The keynote address line up was top class with Paul Debevec, University of Southern California, Henrik Wann Jensen, University of California at San Diego and DTU, Jitendra Malik, University of California at Berkeley, Henrik I. Christensen, Georgia Institute of Technology and Kungliga Tekniska Högskolan, and Aapo Hyvärinen, University of Helsinki.

V. Global competition in the 2010s

In 2011 Rasmus Larsen, DTU was elected as president of DSAGM, thus becoming the society's third president. Jon Sporring, DIKU continued as the DSAGM treasurer and Bjarne K. Ersbøll, DTU as DSAGM secretary. Claus B Madsen, AAU made up the fourth board member. Later Anders B. Dahl, DTU was elected to the board.

In 2011 SCIA was held in Ystad, Sweden. The Scandinavian Workshop on Imaging Food Quality organized by among others Line Clemmensen, Bjarne Ersbøll, and Rasmus Larsen took place immediately after the main conference. In the following years SCIA came to Espoo, Finland in 2013; Copenhagen, Denmark in 2015; Tromsø, Norway in 2017; and Norrköping, Sweden in 2019.

This was the decade in which it became a concern in Danish manufacturing industry that massive offshoring of industrial production first to eastern Europe and later China in the long run would be a threat to innovation in Danish industry. A national consortium called the Manufacturing Academy of Denmark (MADE) consisting of large industry as well as SMEs, universities and RTOs was formed. Politically manufacturing research was prioritized and over the next decade a series of large programs was offered by the Danish research councils. Computer vision for industrial inspection and process and quality control and robotics became key technologies in this program and the DTU

and other Danish image analysis groups have had a significant effect here in making manufacturing agile, and flexible, and economical in Denmark again.

Oil and gas production began in the Danish part of the North Sea in 1972 just before the 1973 oil crisis. Production peaked in 2005 and Denmark was self-sufficient from 1997 to 2013. Since peaking there has been a strong focus on renewable energy sources particularly wind energy and energy conversion technologies such as power-to-X in Denmark. This led in this decade to a long series of new applications for image analysis. Particularly, for assessing 3D structure of materials. Also adding to this research track were the plans for the world-class, large-scale facilities for X-rays - the MAX IV laboratory - and for neutrons - the European Spallation Source - outside the city of Lund in Southern Sweden. The 3D energy materials of interest include a wide range such as chalk cores from the North Sea for assessing oil permeability, various types of solid oxide fuel cells for inspection of interior structure, wind turbine blade interior structure consisting of glass fibers enforced resin for assessment quality and nucleation of breakage.

The 3D scanning applications does not stop with energy materials. Large programs for digitization of natural heritage collections both of rock samples and biology have also occupied researchers at the Danish image analysis groups.

In 2015 DSAGM was again hosting SCIA. The conference series had experienced a slightly waning participation in previous years. Many doctoral students and faculty members in the Scandinavian groups preferred to send their manuscripts to and to participate in European and world conferences. However, an effort was made for yet another successful SCIA. Rasmus Larsen and Mads Nielsen were the general chairs, Rasmus R. Paulsen and Kim Steenstrup Pedersen (cf. page 11) the program chairs and Dan Witzner Hansen the local arrangement chair. The conference venue was the IT-University, and the conference dinner was held at the island fortress Trekroner at the entrance to the Copenhagen harbor. The program included excellent keynote addresses as well as a series of invited talks from image analysis group leaders in Norway, Sweden, and Finland. Professor Serge Belongie, Cornell University turned up unexpected at the conference. He had hosted Ph.D. students from the Danish groups on their external research stays in his labs, his own Ph.D. advisor professor Jitendra Malik, UC Berkeley had been a keynote speaker at the previous SCIA in Denmark in 2007, and as he was in Copenhagen for family reasons, he took the opportunity to meet the local community. This was the first of a series of professional visits to Denmark, others were as a speaker at the annual DTU professors' dinner i 2016 and as a lecturer on unsupervised learning at the DTU/DIKU/AAU summer school in Slagelse in 2016.

This decade was also the period where the large Danish private foundations began to significantly fund activities in image analysis. Several of the large Danish industries are foundation owned and controlled. This goes for the roof top window manufacturer Velux, for the Carlsberg Brewery, the pharma-companies Leo Pharma and Lundbeck, and the Novonordisk and Novogenesis pharma and biotech companies. The foundations behind these companies, the Villum foundation, the Carlsberg Foundation, the Leo Foundation, the Lundbeck Foundation, and the Novo Nordisk Foundation each have large programs for supporting university research. Each have their own preferences governed by their statutes for supporting natural science, health and clinical science, arts and humanities, or technical science; basic or applied science, etc. Both because all the underlying companies are doing well or extremely well, the Novo Nordisk Foundation is now the largest philanthropic foundation in the world, and because data science including image analysis is recognized across the board as a fundamental science and as a foundation for all other sciences, funding has increased dramatically. Moreover, image analysis gets funding not just as a support discipline but in its own right.

VI. AI in the 2020s

Rasmus Larsen, DTU continued as the president of DSAGM, Jon Sparring, DIKU continued as the DSAGM treasurer. Anders B. Dahl (cf. page 12), DTU substituted Bjarne K. Ersbøll, as DSAGM secretary, and Claus B. Madsen continued as the fourth board member.

In 2021 SCIA was postponed due to the corona virus disease pandemic and held in 2023 in Levi, Finland. Rikke Gade (cf. page 12) from Aalborg University was a program co-chair this year. In 2025 DSAGM organized SCIA in Reykjavik, Iceland.

Around the turn of the decade there was a political process in the Danish ministry of science and higher education to push Denmark further forward as an elite research nation. A joint programme to fund four centers and recruit PIs internationally in AI and energy research was constructed between the ministry, the Danish national Research Foundation and four private foundations. Centers were to be national and have a 13-18 year horizon. The DSAGM groups in Copenhagen saw an opportunity for an AI center with a strong focus on image analysis. The result was the P1 AI Pioneer center led by professor Serge Belongie who was recruited from Cornell University to come to the University of Copenhagen and lead the center. The image groups at DTU, AAU, and ITU all have a strong footprint in the pioneer center.



Fig. 2 2024 Volcanic outbreak in Grindavik.

In 2025 it was again time for a Danish SCIA and again following conferences in Aalborg and Copenhagen DSAGM decided to go to the North Atlantic. SCIA 2025 was held at the University of Iceland in Reykjavik. Rasmus Larsen and Thomas Moeslund were the general chairs and Vedrana Dahl Andersen (cf. page 12) and Jens Pedersen (cf. page 12) were the programme chairs. Dima Damen from the University of Bristol and Pascal Fua, EPFL gave the keynote addresses. In addition Gro Birkefeldt Møller Pedersen from the Icelandic

Meteorological Office gave an address on volcanic activity in Iceland that captivated the entire audience. The conference excursion went around the so-called golden circle with guided stops at Thingvellir, the 1000 year site of Icelandic parliament, the Geysir hot springs, and the Gullfoss waterfall.

VII. DSAGM profiles



Peter Willemoës Becker⁴ was the first chairman of DSAGM. He was the son of professor in civil engineering Frits Christian Becker and was born in 1925. He received the M.Sc. degree in electrical engineering from the Technical University of Denmark in 1950. After graduation he worked for the Danish Airforce Material Command (1953-56) and General Electrics Companys Electronics Lab. in Syracuse, USA (1956-66). In 1967 he became a faculty member at the Electronics Laboratory at DTU, and in 1968 he was awarded the dr. techn. degree based on a thesis entitled “Recognition of Patterns“. In a 1972 paper he demonstrated a pattern recognition system using “dynamical

⁴ Dansk Civil-og Akademiingeniørstat1971. Biografiske oplysninger om KANDIDATER FRA DANMARKS TEKNISKE HØJSKOLE OG DANMARKS INGENIØRAKADEMI (1829-1968). DANSK INGENIØRFORENING OG KRAK

pictorial information” for handwritten character recognition with 95,6% accuracy⁵. This included the construction of a device that could read out the trajectory of a copper-tipped pen on a copper plate.



Erik Granum⁶ was born in 1944. After vocational education as a radio mechanic and as a B.Sc. in engineering, and some years in industry he was enrolled as a M.Sc. student and subsequently as a Ph.D. student at the Electronics Laboratory at DTU with P.W. Becker as his doctoral advisor. He graduated with a M.Sc. degree in 1973 and a Ph.D. degree in 1981 based on a thesis entitled *”Pattern Recognition Aspects of Chromosome Analysis. Computerised and Visual Interpretation of Banded Human Chromosomes”*. After a few years with a British Medical Research Council laboratory in Edinburg Erik Granum joined the faculty af Aalborg University in 1983 and in 1984 he formed the laboratory for image analysis. He became a full professor at AAU in 1989 and continued to lead the laboratory for image analysis until his retirement in 2009. He passed away in 2024.



Peter Johansen was born in 1938. He obtained the mag. scient degree in mathematics from the University of Copenhagen in 1962 and was awarded the dr. phil. degree in 1973. From 1964-67 he has an amanuensis at the Pulse- and Digital Techniques at the Technical University of Denmark. He was employed at the Massachusetts Institute of Technology in 1967-69. In 1969 he joined the faculty at the Department for Computer Science (DIKU) at the University of Copenhagen. From 1974 as a full professor until his retirement in 2008. He served a term as dean for the faculty of science in 1988-90. His research interest have included algebraic and combinatorial aspects of computational vision. At DIKU he formed the image group.



Annelise Rosenfalck was born in 1922 and obtained the M.Sc. (EE) degree from the Technical University of Denmark in 1947. With a fellow student she was the first female electrical engineer in Denmark. After graduation she developed an electro myopgraph for Dansk Industri Syndikat (DISA). After studies at Yale University and MIT in 1950-51 she was employed as a researcher and from 1966 as an associate professor at the Neurophysiological Institute at the University of Copenhagen. In 1978 she became the first Danish professor of biomedical engineering at Aalborg University. In 1973 she was one of the founders of the Danish Society for Biomedical Engineering.



Knut Conradsen was born in 1945 and obtained the cand. scient degree in mathematics with specialization in probability theory and statistics in 1970. Immediately after graduation he was employed as an amanuensis at the Institute for Mathematical Statistics and Operations Research at the Technical University of Denmark. His interest in geology prompted him to work with spatial statistics of geological samples from Greenland and from the beginning of the 1980s after a sabbatical stay at the Dept. of Statistics at Stanford University also remote sensing imagery. He formed the image group at IMSOR ijn the 1980s. In 1992 he became a full professor at DTU and from 1995-2010 he served at the university provost. He retired in 2016 but has continued as a emeritus professor.

⁵ P. W. Becker & Knud A. Nielsen. "Pattern Recognition Using Dynamic Pictorial Information," in *IEEE Transactions on Systems, Man, and Cybernetics*, vol. SMC-2, no. 3, pp. 434-437, July 1972.

⁶ Erik Granum blog posts, <https://erikgranum.blog.aau.dk>



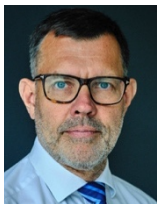
Ruzena Bajcsy was born in Slovakia in 1933. Having escaped Holocaust she obtained her MS and Ph.D. degrees in electrical engineering from the Slovak Technical University in Bratislava in 1957 and 1967. She fled from communism to the USA, where she obtained her second Ph.D. degree from Stanford University. After a long career at the University of Pennsylvania she became a professor of computer science and electrical engineering at the University of California, Berkeley. She was a frequent visitor to Denmark and the Dept. of Computer Science at the University of Copenhagen and a many time host to Danish Ph.D. students at Berkeley. She has received an honorary doctorate from Kungliga Tekniska Högskolan in Stockholm.



Henrik I. Christensen was born in 1962 and obtained the M.Sc.(EE) and Ph.D degrees from Aalborg university in 1989 and 1987, respectively. He was a faculty member at Aalborg university until 1996 where he moved to Kungliga Tekniska Högskolan in Stockholm. Here he became a full professor in 1998. From 2006 he was a full professor and Director at the Georgia Tech Center for Robotics and Intelligent Machines. In 2026 he moved to UC San Diego and from 2017 he is the Qualcomm Chancellor's Chair in Robot Systems, UCSD. He has a long list of honors, awards and accomplishments. He is a international consulat to governments, organisations, and companies on robotics and has been the part of several robotics companies.



Bjarne K. Ersbøll was born in 1957 and obtained the M.Sc.(eng) and Ph.D. degrees from the Technical University of Denmark with Knut Conradsen as his advisor in 1984 and 1988, respectively. He became a faculty member at DTU in 1986 and a full professor in applied statistics at DTU in 2010. At the department of Mathematics and Computer Science he has led the internal and external consultancy service and also the section for statistics and data science.



Rasmus Larsen was born in 1966 and obtained the M.Sc.(eng) af Ph.D. in 1991 and 1994 from IMSOR and later the Department for Mathematical Modelling (now DTU Compute). His advisors were Knut Conradsen and Bjarne Kjær Ersbøll. During his Ph.D. he visited the Computer Vision Laboratory at Linköping University. In 1995 he was a visiting scholar at UCSD and in 2003-4 at the Dept. of Statistics, at Stanford University. He was an associate professor from 2000 and full professor at DTU from 2008. He was head of the image group at DTU Compute in 2001-15, head of department at DTU Compute in 2015-17 and the DTU provost from 2017-2025. With Mads Nielsen he began the DSAGM endorsed annual DTU/UCPH/AAU summer school series in 2009. In 2011 he was elected president of DSAGM. He was general chair of SCIA 2015 and 2025. He was an invited speaker at SCIA 2003 in Göteborg. He was instrumental in establishing the AI Pioneer Center P1 in Denmark.



Mads Nielsen was born in 1965 and obtained his M.Sc. degree in Computer Science and Physics in 1992 and his Ph.D. degree in 1995 form the University of Copenhagen with Søren I. Olsen as his advisor. He had postdoc positions at Utrecht University in the Imaging Sciences Institute and at INRIA in Antipolis. In 1999 he became a full professor at the IT- University of Copenhagen and in the 2007 be returned with his research group to the dept. pf Computer Science at the University of Copenhagen and as leader of the image analysis group there. From 2016-2021 he served as head of department at DIKU. He has started several companies with image analysis solutions in medical image analysis including Cerebiu, Biomediq, and Prenaital. With Rasmus Larsen he began the DSAGM sponsored annual DTU/UCPH/AAU summer school series in 2009. He was general chair of SCIA 2015. He was a key scientific lead in establishing the AI Pioneer Center P1 in Denmark.



Jon Sparring was born in 1969 and obtained his M.Sc. and Ph.D. degrees from the Dept. of Computer Science at the University of Copenhagen in 1992 and 1995. Part of his Ph.D. was carried out at the IBM research Center in Almaden, California and he was later a visiting researcher at the Foundation for Research and Technology – Hellas, Greece. He was an assistant professor with the 3D lab at the School of Dentistry and subsequently an associate professor at the Dept. of Computer Science at the University of Copenhagen, where he became a full professor in medical image processing in 2018. In 2012-13 he was a visiting professor at McGill University in Montreal. He has been the DSAGM treasurer since the 2000s.



Claus Brøndgaard Madsen obtained his M.Sc.(eng) and Ph.D. degrees in computer vision from Aalborg University in 1991 and 1994. His advisor was Henrik I. Christensen. He had postdoctoral positions at the University of Coimbra and Kungliga Tekniska Högskolan in Stockholm. In 1995 he became an associate professor at Aalborg University focusing on computer graphics and augmented reality. He was the local arrangements chair of SCIA 2007 and DSAGM board member since the 2000s.



Rasmus Reinhold Paulsen obtained his M.Sc.(eng) and Ph.D. degrees from DTU in 1998 and 2004. His advisor was Rasmus Larsen. His Ph.D. was an industrial project with Oticon and he continued to work as a development engineer for this company before returning to DTU as an assistant professor in 2008 and associate professor in 2009. In 2023 he became a full professor in medical image analysis. He has been a main organizer of the DTU/UCPH/AAU summer schools since 2009. He was the programme chair for SCIA 2015.



Kim Steenstrup Pedersen was born in 1973 and obtained his M.Sc. and Ph.D. degrees in 1999 and 2003 from the Dept. for Computer Science, University of Copenhagen. During his Ph.D. he spent 6 months at Brown University. Immediately after graduating he was briefly an assistant professor at the Dept. for Computer Science before becoming one at the IT-University of Copenhagen. He is presently since 2021 a full professor at Dept. for Computer Science and the Natural History Museum of Denmark. He was the program co-chair of SCIA 2015, and since the 2010s the DSAGM accounts auditor.



Thomas Moeslund was born in 1971. He obtained his M.Sc. and Ph.D. degrees from Aalborg University in 1996 and 2003. His advisor was Erik Granum. After postdoc, assistant, and associate professor positions he became a full professor in computer vision at Aalborg University in 2016. He is leading the AI for people center at Aalborg University and is a co-lead of the AI Pioneer Center P1. He was a general co-chair at SCIA 2025. He has been an organizer of four ICPR workshops.



Dan Witzner Hansen was born in 1972. He obtained his M.Sc. degree in computer science and mathematics from Aarhus University in 1999 and his Ph.D. degree from the IT-University of Copenhagen (ITU) in 2003. He was an assistant professor at ITU and DTU, an associate professor at ITU and became a full professor in data science at ITU in 2021. He was the local arrangements chair for SCIA 2015. He is a co-lead of the AI Pioneer Center P1.



Anders Bjorholm Dahl was born in 1977. He holds an M.Sc. degree from 2004 in forestry from the Royal Veterinary and Agriculture University, Frederiksberg, Denmark and a Ph.D. in computer vision from 2009 from DTU. After a postdoc employment he became an associate professor in 2013 and a full professor in 3D image analysis in 2018. He leads the visual computing section at DTU Compute since 2015 as well as the QIM center for quantification of imaging data from MAX IV. From 2017 he has been a DSAGM board member.



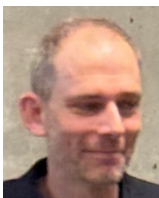
Vedrana Andersen Dahl is born in 1974. She holds M.Sc. degrees in mathematics and physics from the University of Zagreb from 1999 and in information technology from the IT-University of Copenhagen from 2007. Her Ph.D. degree was obtained from DTU in 2011. She has been an assistant and associate professor at DTU before becoming a full professor in 2025. She was a program co-chair for SCIA 2025.



Rikke Gade obtained her M.Sc.(EE) and Ph.D. degrees from Aalborg University in 2011 and 2014. Her advisor was Thomas Moeslund. She became an assistant professor in 2015 and an associate professor in computer vision at Aalborg University in 2019. She was a program chair for SCIA 2023 in Levi, Finland.



Søren Ingvar Olsen received his M.Sc. and Ph.D. degrees in computer science from the University of Copenhagen in 1984 and 1988, respectively. He was an assistant professor 1988-1991 and hereafter associate professor at the Department of Computer Science, University of Copenhagen until his retirement and transition to an emeritus professor. In 2006 he was a visiting professor at University Blaise-Pascal in Clermont-Ferrand. He served on the board of DSAGM in the 1990s.



Jens Pedersen received his M.Sc. and Ph.D. degrees in computer science from the University of Copenhagen in 2010 and 2014, respectively. He has been a visiting researcher at University College London. After a postdoc period he is an associate professor at the dept. for computer science at the University of Copenhagen. He was a program co-chair for SCIA 2025.



Serge Belongie was born in 1974. He did his undergraduate studies at California Institute of Technology, and received his Ph.D. degree from University of California, Berkeley in 2000 with professor Jitendra Malik as advisor. He was a professor of computer science at UCSD 2001-2013, a full professor at Cornell University from 2013-2021, where he also served a term as associate dean. From 2021 he is a full professor at University of Copenhagen and head of the Danish Pioneer Centre for Artificial Intelligence. He and his co-authors received a Marr prize honorable mention at ICCV in 2007, and the ICCV Helmholtz prize in 2015. In 2025 he and Pietro Perona received the American Computer & Robotics Museum Stibitz-Wilson Award for their work on Visipedia, a landmark project in visual recognition and human-centered artificial intelligence. He has formed several companies, and from 2025 he is the president of ELLIS – the European Laboratory for Learning and Intelligent Systems.