

*Curriculum Vitae*  
**Jón Atli Benediktsson**  
*e-mail: benedikt@hi.is*

**Occupation:**

Rector/President, University of Iceland

**Degrees:**

Cand. Scient, Electrical Engineering, University of Iceland, June 1984.

M.S.E.E. from Purdue University, W. Lafayette, Indiana, May 1987.

M.S.E.E. thesis: *Methods for Multisource Data Analysis in Remote Sensing.*

Ph.D. degree in Electrical Engineering, Purdue University, W. Lafayette, Indiana, December 1990.

Ph.D. thesis: *Statistical Methods and Neural Network Approaches for Classification of Data from Multiple Sources.*

**Research Interests**

Remote sensing, analysis of biomedical signals, pattern recognition, data fusion, neural networks, image analysis and signal processing.

**Start Up Companies**

Co-founder of the biomedical company Oxymap Inc. (see oxymap.com)

**Employment History:**

- (1) Rector and President, University of Iceland July 1, 2015 – present.
- (2) On the academic staff of the University of Iceland from 1991. Full Professor from 1996.
- (3) Director of Academic Development Rector's/President's Office, University of Iceland, Sept. 2006-Jan. 2009.
- (4) Pro-Rector for Academic Affairs, University of Iceland, Feb. 2009-July 2015.
- (5) Head, Graduate School, University of Iceland, Feb. 2009-
- (6) Member of Ad Hoc Graduate Faculty, University of Louisville, Louisville, Nov. 2005 – 2008.
- (7) Visiting Professor University of Trento, Italy, 2002-2015.
- (8) Visiting Professor, Kingston University, Kingston Upon Thames, UK, 1999-2004.
- (9) Chairman, Metan Ltd., 1999-2004.
- (10) Visiting Scientist at the Joint Research Centre (JRC), European Commission, Ispra, Italy, April-July 1998.
- (11) Visiting Scholar DTU, Lyngby, Denmark, Jan. - March 1998.
- (12) Fellow at the Australian Defence Force Academy (ADFA), University of New South Wales, August 1997.
- (13) Visiting Scholar Purdue University, W. Lafayette, Indiana, USA, Jan. – Aug. 1995.
- (14) Research Assistant, School of Electrical Engineering and Laboratory for Application of Remote Sensing (LARS), Purdue University, 1986-1990.

- (15) Employed by the Engineering Research Institute of the University of Iceland 1984-85.

**Awards:**

- (1) Highly Cited Researcher from 2018 (Clarivate Analytics).
- (2) Co-Recipient of the 2024 IEEE Geoscience and Remote Sensing Society's Highest Impact Paper Award (with S. Li, W. Song, L. Fang, Y. Chen, and P. Ghamisi, "Deep Learning for Hyperspectral Image Classification: An Overview," in *IEEE Transactions on Geoscience and Remote Sensing*, vol. 57, no. 9, pp. 6690-6709, Sept. 2019, doi: 10.1109/TGRS.2019.2907932.
- (3) Outstanding Associate Editor, IEEE Access, 2023
- (4) Received the Gold Member Award from the Icelandic Society of Chartered Engineers, VFI, 2023.
- (5) Fellow, Asia-Pacific Artificial Intelligence Association (AAIA), 2023.
- (6) Awarded the Order of the Falcon for contributions to international science and innovation in remote sensing and digital image analysis and university education work, 2021.
- (7) Received the IEEE GRSS Education Award for "outstanding contributions to education in geoscience and remote sensing," 2020
- (8) Elected member of the Academia Europa, 2019.
- (9) Received the IEEE GRSS David Landgrebe Award 2018 for outstanding contributions to Image Analysis in Remote Sensing
- (10) Received the 2016-2017 Best Paper Award from the *International Journal of Image and Data Fusion* with J. Senthilnath, Deepak Kumar and Xiaoyang Zhang for the paper "A novel hierarchical clustering technique based on splitting and merging."
- (11) Outstanding Electrical and Computer Engineer Award - School of Electrical and Computer Engineering, Purdue University, 2016.
- (12) Co-Recipient of the 2012-2013 Best Paper Award from the *International Journal of Image and Data Fusion* with P.R. Marpu, M. Pedernana, M. Dalla Mura, S. Peeters and L. Bruzzone for the article "Classification of hyperspectral data using extended attribute profiles based on supervised and unsupervised feature extraction techniques."
- (13) Co-Recipient of the 2013 IEEE Geoscience and Remote Sensing Society's Highest Impact Paper Award (with Mathieu Fauvel, Jocelyn Chanussot and Jóhannes R. Sveinsson) for the paper "Spectral and Spatial Classification of Hyperspectral Data Using SVMs and Morphological Profiles," *IEEE Trans. on Geoscience and Remote Sensing*, vol. 46, no. 11, pp. 3804-3814, Nov. 2008.
- (14) Recipient of the 2013 *IEEE/VFI Electrical Engineer of the Year* with the citation "The joint Award is granted as a recognition for excellent performance in the field of electrical engineering or as a recognition to electrical engineers who have made significant contributions to Icelandic society."
- (15) Elected *Fellow of SPIE* (International Society for Photonics and Optics ) 2013 "For achievements in multi-temporal and hyperspectral remote sensing."
- (16) 2012 Transactions Paper Award, *IEEE Trans. on Geoscience and Remote Sensing* for the paper A. Villa, J.A. Benediktsson, J. Chanussot and C. Jutten, „Hyperspectral Image Classification With Independent Component Discriminant Analysis,“ *IEEE Transactions on Geoscience and Remote Sensing*, 2011, Volume:

- 49 , Issue: 12 , Part: 1, Pages: 4865 - 4876, DOI: 10.1109/TGRS.2011.2153861
- (17) Outstanding Service Award from IEEE Geoscience and Remote Sensing Society, July 2007.
  - (18) Outstanding Research Award, Engineering Research Institute., University of Iceland, Nov. 2006.
  - (19) First Prize in the University of Iceland's technology innovation competition "Upp úr Skúffunum," 2004 (along with Einar Stefansson and Thor Eysteinnsson).
  - (20) Elected *Fellow of the IEEE* (Institute of Electrical and Electronics Engineers), 1.1.2004 with the citation „For contributions to pattern recognition and data fusion in remote sensing”.
  - (21) Elected to the Icelandic Science Society, 2003.
  - (22) Recipient of the *IEEE Third Millennium Medal* “in recognition and appreciation of valued services and outstanding contributions,” (received in Hawaii, July 27, 2000)
  - (23) Recipient of an award certificate from the IEEE Geoscience Remote Sensing Society, for “truly exceptional leadership and guidance, as Chairperson of the Data Fusion Technical Committee during the three years 1996-1999” (received in Hawaii, July 27, 2000)
  - (24) Recipient of an award certificate from IEEE Region 8 for being the organizer of the IEEE Iceland Section in the year 2000.
  - (25) Elected in 1999 to the Administrative Committee (AdCom) of the IEEE Geoscience and Remote Sensing Society, for the term 2000-2002. Re-elected in 2002 for the term 2003-2005. Re-elected in 2007 for the term 2008-2010.
  - (26) Elected in 1996, Chairman of “Technical Committee on Data Fusion” of the IEEE Geoscience and Remote Sensing Society. Re-appointed in 1997 and 1998.
  - (27) Recipient of the Outstanding Icelandic Young Research Award from the Icelandic Research Council, 1997.
  - (28) Best Paper Award - Novel Engineering Applications at ANNIE '95, St. Louis, MO, November 1995.
  - (29) Recipient of the Stevan J. Kristov Award, as outstanding graduate student in remote sensing, Purdue University May 1991.
  - (30) Member of Tau Beta Phi from 1985.

#### **Committees and Boards:**

- (1) President, Aurora Universities, 2020-2024, On Aurora Universities Board, 2018-.
- (2) Chairman, Nordic University Association, NUS, 2022-2023.
- (3) Chairman, IEEE GRSS Fellow Evaluation Committee, 2019-2020. Member of Committee 2017-2020.
- (4) Member, IEEE Fellow Evaluation Committee, 2014-2015
- (5) Member, Icelandic Science and Technology Council 2003-2006, 2012-2023.
- (6) 2011-2012 President, IEEE Geoscience and Remote Sensing Society. Member of its science committee (2012-2023) and technology committee (2020-2023).
- (7) Executive Vice President, IEEE Geoscience and Remote Sensing Society 2010.
- (8) Chairman of Steering Committee, IEEE Journal of Selected Topics in Applied Earth Observations, 2008 – 2010
- (9) On the Board of Directors Oxymap Inc. 2008-2015
- (10) Vice President, Professional Activities, IEEE Geoscience and Remote Sensing Administrative Committee 2008-2009.

- (11) Chairman, Icelandic Student Research Fund, 2007-2009.
- (12) Chairman, Quality Assurance Committee, University of Iceland, July 1, 2006-present.
- (13) Chairman, Strategic Planning Working Group, University of Iceland, Dec. 2005 – March 2006.
- (14) Chairman, Working Group on Reactions to Evaluations of the University of Iceland, 2005.
- (15) Member of the Icelandic Research and Technology Council since its formation on April 8, 2003 to April 2006.
- (16) Chairman of University of Iceland's Research and Science Committee from July 1999 to Dec. 2005. Member of the committee from 1994 to 2005.
- (17) Vice President of Technical Activities, IEEE Geoscience and Remote Sensing Society, 2002.
- (18) Member, Administrative Committee, IEEE Geoscience and Remote Sensing Society, 2000-2002.
- (19) Member, Nordisk Forskning Politisk Raad 2004.
- (20) Member, Advisory Panel of the Physical and Engineering Science & Technology (PST) Sub-Programme, NATO, Bruxelles, from Jan. 1, 2003 to June 2004.
- (21) Organizer and First Chairman of the IEEE Iceland Section, 2000 - 2003.
- (22) Organizer, Circuits & Systems/Signal Processing Chapter, IEEE Iceland Section, 2001.
- (23) Organizer, Computer Society Chapter, IEEE Iceland Section, 2001.
- (24) Chairman, Committee on the restructuring the Icelandic School System, Information and Technical Curriculum, Ministry of Education, 1996.
- (25) Chairman of the Electrical and Computer Engineering Department, University of Iceland, 1997-1999.
- (26) Chairman, Department of Electrical Engineering, University of Iceland, 1993-1994.
- (27) Member, Committee on Assistantships, University of Iceland, 1996-2000.
- (28) Member, Review Panel for Application in Environmental and Natural Sciences, Icelandic Research Council, 1996-2000.
- (29) Member of board, Environmental Institute, University of Iceland, Feb. 2002 – 2005.
- (30) Member of board, Fisheries Institute, University of Iceland, Feb. 2002 – 2005.
- (31) Member of Intellectual Property Rights Committee, University of Iceland, May 2002 – 2007.

**Graduated PhD students:**

1. Mathieu Fauvel
2. Yuliya Tarabalka
3. Guilia Troglia
4. Mauro Dalla Mura
5. Alberto Villa
6. Sergio Bernabe Garcia
7. Nicola Falco
8. Pedram Ghamisi
9. Gabriele Cavallaro
10. Robert A. Karlsson

### **Opponent and External Examiner at Ph.D. Exams:**

- (1) External Examiner, Ph.D. examination, Australian Defence Academy, University of New South Wales, Australia, June 1995.
- (2) External Examiner, Ph.D. examination, Australian Defence Academy, University of New South Wales, Australia, August 1996.
- (3) External Examiner, Ph.D. examination, Australian Defence Academy, University of New South Wales, Australia, Sept. 1996.
- (4) External Examiner, Ph.D. examination, Nanyang Technological University, Singapore, February 1998.
- (5) External Examiner, Ph.D. examination, University of Manitoba, Canada, March 2001.
- (6) External Examiner, Ph.D., Denmark's Technical University, Lyngby, Denmark, September 2003.
- (7) Opponent, PhD examination, University of Oslo, Oct. 2007.
- (8) External Examiner, PhD examination, University of New South Wales, Australia, May 2013. Student: Guangyang Zhang.
- (9) External Examiner, PhD examination, University of Sydney, Australia, June 2013. Student: Sven Schneider.
- (10) University of Trento, Trento, Italy, March 2006, Chair of Examination Committee. Student: Mingmin Chi.
- (11) University of Trento, Trento, Italy, March 2006, Chair of Examination Committee. Student: Anelia Grigorova.
- (12) University of Louisville, Louisville, Kentucky, Nov. 2005. Student: Refaat M. Mohamed.
- (13) Technical University of Lisbon, June 2010. Student: Jun Li.
- (14) ParisTech, June 2012. Student: Santiago Velasco-Forero.
- (15) University of Extremadura, Spain, Jan. 2014. Student: Inmaculada Dopido
- (16) INPG, Grenoble, France, Oct. 2014. Student: Junshi Xia.
- (17) DTU, Denmark, Nov. 2014. Student: Jacob Schack Vestergaard.

### **Member of PhD Committees:**

- (1) University of Genoa, Italy, Dec. 2023 (Chairman of Committee). Student: Martina Pastorino
- (2) University of Trento, Trento, Italy, March 2006 (Chairman of Committee). Student: Mingmin Chi.
- (3) University of Trento, Trento, Italy, March 2006 (Chairman of Committee). Student: Anelia Grigorova.
- (4) University of Louisville, Louisville, Kentucky, November 2005. Student: Refaat M. Mohamed.
- (5) Technical University of Lisbon, June 2010. Student: Jun Li.
- (6) ParisTech, June 2012. Student: Santiago Velasco-Forero.
- (7) University of Iceland, 2012. Student: Sveinn Hákon Harðarson
- (8) University of Iceland, 2010. Student: Sigurjón Árni Guðmundsson
- (9) University of Iceland, 2008. Student: Rúnar Unnþórsson

## **Editorial and Review Work**

- (1) Senior Editor, *Proceedings of the IEEE*, 2021-
- (2) On the IEEE Press Editorial Board, 2020-
- (3) On the Editorial Board of *Proceedings of the IEEE*, 2014-2019.
- (4) On the Editorial Board of *Remote Sensing* since 2015.
- (5) Guest Editor of special issue on „Analysis of Remote Sensing Image Data," *Remote Sensing*, 2014 and many others since then.
- (6) Editorial Board Member, *Proceedings of IEEE*, 2014-2019.
- (7) Associate Editor, *IEEE Access*, 2013-
- (8) Evaluator, Italian Evaluation of Research Quality exercise (VQR 2004-2010)
- (9) Special Issue Guest Editor, *Proceedings of IEEE*, Special issue on Very High-Resolution Remote Sensing, vol. 101, no. 3, March 2013.
- (10) Chairman of Steering Committee, *IEEE Journal of Selected Topics in Applied Earth Observation and Remote Sensing*, 2007-2010.
- (11) International Editorial Board Member, *International Journal of Image and Data Fusion*, 2009-
- (12) Editor-in-Chief, *IEEE Trans. on Geoscience and Remote Sensing*, from Jan. 1, 2003 – Dec. 31. 2008.
- (13) Special Issue Co-Editor, *IEEE Transactions on Geoscience and Remote Sensing*, Special Issue on Urban Remote Sensing, vol. 41, no. 9, Sept. 2003.
- (14) Special Issue Co-Editor, *IEEE Transactions on Geoscience and Remote Sensing*, Special Issue on Data Fusion, vol. 37, no. 3, May 1999.
- (15) Associate Editor, *IEEE Geoscience and Remote Sensing Letters*, 2003-2022.
- (16) Associate Editor, *IEEE Transactions on Geoscience and Remote Sensing*, 1999-2003, 2009-2022.
- (17) Review work for several journals from 1987, including: *IEEE Transactions on Neural Networks*, *IEEE Transactions on Geoscience and Remote Sensing*, *IEEE Transactions on Systems, Man and Cybernetics*, *IEEE PAMI*, *Information Fusion*, *International Journal of Remote Sensing*, *International Journal of Neural Systems*, *Canadian Journal of Remote Sensing*, *Computer Vision, Graphics and Image Processing*, *Computers and Geoscience*, *Information Fusion*, *International Journal of Pattern Recognition and Artificial Intelligence*, *Photogrammetric Engineering and Remote Sensing*, *Remote Sensing of the Environment* and *Optical Engineering*.
- (18) Has reviewed book proposals for *Kluwer Academic Publishers* and *John Wiley and Sons*.
- (19) Has reviewed funding applications for many research councils, including *The National Science Foundation (NSF)*, *Italian Ministry for University and Research (MURST)*, *the Icelandic Research Council*, *The Australian Research Council (ARC)*, *The Norwegian Research Council* and *Research Grant Council, Hong Kong*.

## **Invited Talks:**

- (1) “Advancing Geoscience through Large-Scale AI and Remote Sensing with Supercomputing”, Keynote talk, IEEE ICCA, Reykjavik, Iceland, June 6, 2024.
- (2) “Machine Learning for Remote Sensing for Big Data by Supercomputing,” Keynote talk, NOBIM Conference, Tromsø, Norway, June 8, 2023.
- (3) “Mathematical Morphology for High Resolution Remote Sensing Images.”

- Plenum talk at the 6th Chinese Conference on Pattern Recognition, Changsha, China, Nov. 14, 2014.
- (4) "Morphological and Attribute Profiles in Classification of Hyperspectral Images," Sun Yat Sen University, Guanzhou, China, November 18, 2014.
  - (5) "Morphological and Attribute Profiles for Classification of Hyperspectral Images," Methodological Aspects of Hyperspectral Imaging (Mahi 2013) Workshop, Nice, France, Oct. 14, 2013.
  - (6) "Morphological Profiles in Classification of Very High-Resolution Remote Sensing Imagery, InfoTech Lecture Series, University of Florida, Gainesville, March 29, 2013.
  - (7) "Classification of Remote Sensing Images Using Morphological Profiles," NCU Mini Workshop on Remote Sensing, National Central University, Jhongli, Taiwan, Jan. 17, 2013.
  - (8) "Morphological Profiles in Classification of Remote Sensing Imagery," University of Extremadura, Caceres, Spain, July 12, 2012.
  - (9) "Classification of Remote Sensing Data from Multiple Sources," (Plenary talk) ISPRS/IEEE International Workshop on Multi-platform Multi-sensor Remote Sensing and Mapping, which was held in Xiamen, China, Jan. 10-12, 2011.
  - (10) "Classification of urban remote sensing imagery based on mathematical morphology" (Plenary talk), Joint Urban Remote Sensing Event (JURSE 2011) Munich, Germany, April 11.-13. April 2011.
  - (11) "Hierarchical Analysis of Remote Sensing Data: Morphological Attribute Profiles and Binary Partition Trees," (Plenary talk) International Symposium on Mathematical Morphology (ISMM 2011), Intra, Italy, July 6-8 2011.
  - (12) "Classification of Remote Sensing Images Using Morphological Profiles," IEEE Geoscience and Remote Sensing Society (IEEE GRS-S), Japan Chapter, University of Tokyo, Aug. 31, 2010.
  - (13) "Classification of Remote Sensing Images with Attribute Profiles and Extended Attribute Profiles," 32nd Symposium on Remote Sensing for Environmental Sciences (RSES), August 29, 2010, Shikanoshim, Fukuoka, Japan.
  - (14) "Classification of Remote Sensing Image Urban Data based on Morphological Transformations," Hiroshima University, Aug. 27, 2010.
  - (15) "Classification of Panchromatic and Hyperspectral Images Using Morphological Profiles," NOBIM 2010, Tromsø, June 21, 2010.
  - (16) "Fusion of Multiple Classifiers for Remote Sensing Data," INRIA, Sophia Antipolis, France, September 22, 2008.
  - (17) "Classification of Remote Sensing Data Based on Decision Fusion," University of Oslo, October 30, 2007.
  - (18) "Decision Fusion of Multitemporal SAR and Multispectral Imagery for Improved Land Cover Classification," Keynote speaker, Mapping Without the Sun, Chengdu, China, September 25, 2007.
  - (19) "Multiple Classifier Systems for Remote Sensing," Fudan University, Shanghai, China, September 22, 2007.
  - (20) "Decision Fusion for Classification of Remote Sensing Data," Jilin University, Chanchun, China, September 19, 2007.
  - (21) "Multiple Classifier Systems in Remote Sensing: From Basics to Recent Developments," Invited speaker, MCS 2007, Prague, Czech Republic, May 23,

- 2007.
- (22) "Decision Level Fusion for Classification of Remote Sensing Data from Urban Areas," Center for Space and Remote Sensing Research, National Central University, Chung-Li, Taiwan, November 29, 2006.
  - (23) "Automatic Retinal Oximetry" Department of Electrical Engineering, National Taipei University of Technology (NTUT), Taipei, Taiwan, November 30, 2006.
  - (24) "Classification of Morphological Profiles in Urban Imagery based on Decision Level Fusion" International Workshop on Modelling and Data Analysis in Environmentrics, Geostatistics and Related Areas, Kyushu University, Fukuoka, Japan, November 17, 2005.
  - (25) "Classification of Remote Sensing Data from Multiple Sources," Environmental Statistics, Theory and Practice, The Institute of Statistical Mathematics, Tokyo, November 22, 2005.
  - (26) "Classification of Remote Sensing Imagery with High Spatial Resolution," European Symposium on Remote Sensing, Conference on Image and Signal Processing XI, Bruges, Belgium, September 20, 2005.
  - (27) "Classification of Hyperspectral ROSIS Data from Urban Areas," Recent Advances in Space Technologies (RAST 2005), Istanbul, Turkey, June 9, 2005.
  - (28) "Classification Approaches for Hyperspectral Imagery with High Spatial Resolution," Department of Information and Communication Technology, University of Trento, March 9, 2005.
  - (29) "Classification of Hyperspectral Image Data of High Spatial Resolution," National Central University, Taiwan, Dec. 1, 2004.
  - (30) "Classification of Hyperspectral Image Data," Drexel University, Philadelphia, PA, Sept. 14, 2004.
  - (31) "Classification of High-Resolution Images from Urban Areas," MIT Lincoln Lab., Lexington, MA, April 27, 2004.
  - (32) "Classification of High-Resolution Images from Urban Areas, Boston University, Boston, MA, April 26, 2004.
  - (33) "Classification of Remotely Sensed Data from Urban Areas," University of Westminster, London, March 3<sup>rd</sup>, 2004.
  - (34) "Classification Methods for Multisource Remote Sensing Data," Opening Talk, Session on Data Fusion, The 2003 Tyrrhenian International Workshop on Remote Sensing, Sept. 15, Elba, Italy.
  - (35) "Multiple Classifiers for Multisource Remote Sensing Data," Informatics and Mathematical Modelling, Denmark's Technical Univerity (DTU), Lyngby, Denmark, Sept. 2, 2003.
  - (36) "Classification of Multisource Remote Sensing Data by Multiple Classifiers", University of Trento, March 19, 2003.
  - (37) "Multiple Classifiers in Multisource Classification", Department of Electrical and Electronic Engineering, Imperial College, London, Jan. 28, 2003.
  - (38) "Multiple Classifiers in Classification of Multisource Remote Sensing Data," Department of Electrical Engineering and Computer Science, University of Kansas, Lawrence, Oct. 22, 2002.
  - (39) "Review of Applications of Wavelets in Speckle Reduction and Enhancement of SAR Images," Conference on Signal Processing in Remote Sensing VII, 8<sup>th</sup> International Symposium on Remote Sensing, Toulouse, France,



- Sept. 19, 2001.
- (40) "Data Fusion and Feature Extraction in the Wavelet Domain," Geo-Spatial Knowledge Processing for Natural Resource Management, University of Insubria, Varese, Italy, June 28, 2001
  - (41) "Decision Fusion Methods for Classification of Multi-source Remote Sensing Data," University of Pavia, Pavia, Italy, June 26, 2001.
  - (42) "Statistical and Neuro-Fuzzy Classification of Multi-source Remote Sensing Data," School of Computing and Information Systems, Kingston University, U.K., April 11, 2000.
  - (43) "Neuro-Fuzzy and Soft Computing in Classification of Remote Sensing Data," 1999 EUROPTO Conference on Signal Processing in Remote Sensing V, Florence, Italy, Sept. 23, 1999.
  - (44) "Data Fusion", 1998 EUROPTO Conference on Signal Processing in Remote Sensing IV, Barcelona, Spain, Sept. 22, 1998.
  - (45) "Classification and Feature Extraction of Hyperdimensional Remote Sensing Data", Dipartimento di Ing. Biofisica ed Elettronica, University of Genova, May 25, 1998.
  - (46) "Classification of Hyperdimensional Remote Sensing Data," Institute of Mathematical Modelling, Denmark's Technical University, Feb. 27, 1998.
  - (47) "Feature Extraction for Hyperdimensional Remote Sensing Data," Institute of Mathematical Modelling, Denmark's Technical University, Feb. 18, 1998.
  - (48) "Classification of Remote Sensing Data with a Combination of Classifiers," Applied Physics Lab., University of Washington, Seattle, Feb. 11, 1998.
  - (49) "Classification of Multisource Remote Sensing and Geographic Data with a Combination of Classifiers," Institute of Mathematical Modelling, Denmark's Technical University, Jan. 28, 1998.
  - (50) "Multistage Classification of Multisource Remote Sensing and Geographic Data," School of Electrical Engineering, University College, University of New South Wales, Canberra, Australia, Aug. 21, 1997.
  - (51) "Classification and Feature Extraction of Hyperdimensional Data," School of Electrical Engineering, University College, University of New South Wales, Canberra, Australia, Aug. 21, 1997.
  - (52) "Multistage Classification of Multisource Remote Sensing and Geographic Data," Department of Geomatics, University of New South Wales, Sydney, Australia, Aug. 20, 1997.
  - (53) "Multistage Statistical and Neural Classifiers Optimized by Linear and Non-Linear Methods", Massachusetts Institute of Technology, May 16, 1997.
  - (54) "Multistage Classifiers Optimized by Linear and Non-Linear Methods," Joint Research Centre, Ispra, Italy, Dec. 2, 1996.
  - (55) "Data Fusion of Multisource and Hyperdimensional Remote Sensing Data," COMPARES Concertation Meeting, University of Cagliari, Italy, Oct. 24, 1996.
  - (56) "Multistage Classifiers Optimized by Neural Networks and Genetic Algorithms," World Congress of Non-Linear Analysts, Athens, Greece, July 15, 1996.
  - (57) "Analysis of Very-High Dimensional Data," World Congress of Non-Linear Analysts, Athens, Greece, July 15, 1996.
  - (58) "Hybrid Classifiers", School of Electrical and Computer Engineering, Purdue University, W. Lafayette, IN, May 22, 1996.

### **Organization of Conferences and Workshops:**

- (1) Conference Co-Chair, SPIE Conference on Image and Signal Processing for Remote Sensing, 2015-2023.
- (2) General Chair, International Symposium on Mathematical Morphology (ISMM), Reykjavik, May 27-29, 2015.
- (3) Program Committee Member, CIARP 2013, the 19th Iberoamerican Congress on Pattern Recognition, Havana, 2.-5.. nóv. 2014.
- (4) Session Organizer, Technical Program Committee Member IGARSS 2014, Quebec City, Canada, July 13-18, 2014.
- (5) Technical Program Committee Member, IEEE Sixth Workshop on Hyperspectral Image and Signal Processing IEEE WHISPERS 2014, Lausanne, Switzerland, June 24-27, 2014
- (6) Conference Co-Chair, SPIE Conference on Image and Signal Processing for Remote Sensing Amsterdam, Netherlands, September 2014.
- (7) Session Organizer, Technical Program Committee Member IGARSS 2013, Sydney, Australia, July 21-26, 2013.
- (8) Conference Co-Chair, SPIE Conference on Image and Signal Processing for Remote Sensing Dresden, Germany, September 2013.
- (9) Program Committee Member, CIARP 2013, the 18th Iberoamerican Congress on Pattern Recognition, Havana, Nov. 20-23, 2013.
- (10) Technical Program Committee Member, IEEE Fifth Workshop on Hyperspectral Image and Signal Processing, WHISPERS 2013, Gainesville, Florida, June 25-28, 2013
- (11) Program Committee Member, ICPRAM 2013, Loire Valley, France, March 6- 8, 2013.
- (12) Technical Program Committee Member, IEEE fourth Workshop on Hyperspectral Image and Signal Processing WHISPERS 2013, Gainesville, Florida, June 2013.
- (13) Scientific Committee Member, 2013 Multiple Classifier Systems Workshop (MCS 2013), Nanjing, China, May 15-17, 2013
- (14) Program Committee Member, ICPRAM 2013, Barcelona, Spain, Feb. 15-18, 2013.
- (15) Technical Program Co-Chairman, Tyrrhenian Workshop 2012 on Advances in Radar and Remote Sensing, Naples, Italy, Sept. 12-14, 2012.
- (16) Program Committee Member, CIARP 2012, the 17th Iberoamerican Congress on Pattern Recognition, Buenos Aires, Sept. 3-6, 2012.
- (17) Technical Program Committee Member, IEEE fourth Workshop on Hyperspectral Image and Signal Processing WHISPERS 2012, Shanghai, China, June 4-7, 2012.
- (18) Conference Co-Chair, SPIE Conference on Image and Signal Processing for Remote Sensing Prague, Edinburgh, Scotland, September 24-27, 2012.
- (19) Technical Program Committee Member IGARSS 2012, Munich, Germany, July 22-28, 2012.
- (20) Program Committee Member, ICPRAM 2012, Algarve, Portugal, Feb. 5-7, 2012.
- (21) Program Committee Member, CVRS 2011 - IEEE/ISPRS workshop on Computer Vision for Remote Sensing of the Environment, Nov. 7, 2011, Barcelona, Spain.
- (22) Scientific Committee Member, 2011 Multiple Classifier Systems Workshop (MCS 2011), Napoli, Italy, June 15-17, 2011.

- (23) Technical Program Committee Member IGARSS 2011, Vancouver, July 21-27, 2011.
- (24) Technical Program Committee Member, IEEE third Workshop on Hyperspectral Image and Signal Processing WHISPERS 2011, Lisbon, Portugal, July 6-9, 2011.
- (25) Scientific Committee Member, Multitemp 2011, Trento, Italy, July 12-14, 2011.
- (26) Conference Co-Chair, SPIE Conference on Image and Signal Processing for Remote Sensing Prague, Czech Republic, Monday-Wednesday 19 - 21 September 2011.
- (27) General Chair, IEEE Second Workshop on Hyperspectral Image and Signal Processing, Reykjavik, June 14-16, 2010
- (28) Conference Co-Chair, SPIE Remote Sensing 2010 - Image and Signal Processing for Remote Sensing, Toulouse, France, Sept. 20-22, 2010.
- (29) Technical Program Committee Member - IEEE 2010 Geoscience and Remote Sensing Symposium (IGARSS 2010), Honolulu Hawaii, July 25-30, 2010.
- (30) Scientific Committee Member - 2010 Multiple Classifier Systems Workshop (MCS 2010), Nile University, Egypt, 7.-9. júlí 2010
- (31) General Chair (with J. Kittler and F. Roli), 7th International Workshop on Multiclassifier Systems (MCS 2009), Reykjavik, Iceland, June 10-12, 2009.
- (32) Co-Chairman, European Symposium on Remote Sensing, Conference on Image and Signal Processing (RS07), September 1-3, 2009, Berlin, Germany.
- (33) Technical Committee, 5th GRSS/ISPRS Joint Workshop on Remote Sensing over Urban Areas (Urban 2009), Shanghai, China, May 20-22, 2009.
- (34) Scientific Committee, Fifth International Workshop on the Analysis of Multitemporal Remote Sensing Images (Multitemp 2009), Mystic, Connecticut, July 28-30, 2009.
- (35) General Co-Chair, IEEE International Symposium on Wireless Communication Systems 2008 (ISWCS'08), Reykjavik 21. – 24. okt. 2008.
- (36) Technical Program Committee, International Symposium on Geoscience and Remote Sensing (IGARSS '2008), Boston, MA, USA.
- (37) Co-Chairman, European Symposium on Remote Sensing, Conference on Image and Signal Processing (RS07), September 15-19, 2008, Cardiff, Wales.
- (38) Workshop Chair, Sixth Euro American Workshop on Information Optics at Grand Hotel Reykjavik, Iceland, 25 – 30 June 2007.
- (39) Program Committee, International Symposium on Geoscience and Remote Sensing (IGARSS '2007), Barcelona, Spain, July 2007.
- (40) Review Committee, 2007 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2007), April, Honolulu, HI.
- (41) Program Committee, 2007 IEEE Workshop on Machine Learning for Signal Processing, Thessaloniki, Greece, August 27-29, 2007.
- (42) International Program Committee, 3<sup>rd</sup> International Conference on Recent Advances in Space Technologies (RAST 2007), Istanbul, Turkey, June 14-16, 2007.
- (43) Technical Committee, 4th GRSS/ISPRS Joint Workshop on Remote Sensing over Urban Areas (Urban 2007), Paris, France, April 11-13, 2007.
- (44) Scientific Committee, 6th International Workshop on Multiclassifier Systems (MCS 2007), Prague, Czech Republic, May 2007.
- (45) Co-Chair, Workshop Chair, Sixth Euro American Workshop on Information Optics at Grand Hotel Reykjavik, Iceland, 25 – 30 June 2007.

- (46) Co-Chairman, European Symposium on Remote Sensing, Conference on Image and Signal Processing XII, Stockholm, September 13-14, 2006.
- (47) Program Committee, 5<sup>th</sup> International Forum on Multimedia and Image Processing (IFMIP), World Automation Congress (WAC) 2006, Budapest, Hungary, July 24-26, 2006.
- (48) Scientific Committee, 4th International Workshop on Pattern Recognition in Remote Sensing (PRRS), Hong Kong, August 2006.
- (49) General Chairman, IEEE 7<sup>th</sup> Nordic Signal Processing Symposium (NORSIG 2006), Reykjavik, Iceland, June 2006.
- (50) Technical Program Committee, 2006 IEEE Workshop on Machine Learning for Signal Processing, Maynooth, Ireland, September 6-8, 2006.
- (51) Technical Committee, Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP 2005), Dec. 13-15, 2005.
- (52) Scientific Committee, 9<sup>th</sup> International Symposium on Physical Measurements and Signatures in Remote Sensing (ISPMS), Beijing, China, Oct. 2005.
- (53) Technical Program Committee, 2005 IEEE Workshop on Machine Learning for Signal Processing, Mystic, Connecticut, Sept. 28-30, 2005.
- (54) Co-Chairman, European Symposium on Remote Sensing, Conference on Image and Signal Processing XI, Bruges, Belgium, September 20-22, 2005.
- (55) Program Committee, International Symposium on Geoscience and Remote Sensing (IGARSS '2005), Seoul, Korea, July 2005.
- (56) Scientific Committee, 9<sup>th</sup> International Symposium on Physical Measurements and Signatures in Remote Sensing (ISPMS), Beijing, China, Oct. 2005.
- (57) Technical Program Committee, 2005 IEEE Workshop on Machine Learning for Signal Processing, Mystic, Connecticut, Sept. 28-30, 2005.
- (58) Scientific Committee, 6th International Workshop on Multiclassifier Systems (MCS 2005), Monterey, CA, June 2004.
- (59) Scientific Committee, Second International Workshop on the Analysis of Multitemporal Remote Sensing Images (Multitemp 2005), Biloxi, Mississippi, May 2005.
- (60) Technical Committee, 3<sup>rd</sup> GRSS/ISPRS Joint Workshop on Remote Sensing over Urban Areas (Urban 2005), Tempe, Arizona, March 2005.
- (61) Co-Chairman, European Symposium on Remote Sensing, Conference on Image and Signal Processing X, Canary Island, September 2004.
- (62) Program Committee, International Symposium on Geoscience and Remote Sensing (IGARSS '2004), Anchorage, Alaska, Sept. 2004.
- (63) Scientific Committee, 3rd International Workshop on Pattern Recognition in Remote Sensing (PRRS), Kingston, UK, August 2004.
- (64) Scientific Committee, 5th International Workshop on Multiclassifier Systems (MCS 2004), Cagliari, Italy, June 2004.
- (65) Co-Chairman, IEEE Workshop on Advances in Remote Sensing, Oct. 27-28, NASA Goddard Visitor Center, Washington DC, USA, 2003
- (66) Technical Program Committee, 2003 Tyrrhenian International Workshop on Remote Sensing September 15-18, 2003, Elba Island, Italy.
- (67) Program Committee, International Symposium on Geoscience and Remote Sensing (IGARSS '2003), Toulouse, France, June 2003.
- (68) Scientific Committee, 12 NBC, the Nordic Baltic Conference on Biomedical Engineering and Medical Physics, Reykjavik, June 2002.

- (69) Co-Chairman, European Symposium on Remote Sensing, Conference on Image and Signal Processing VIII, Crete, September 2002.
- (70) Technical Committee, IEEE/ISPRS Joint Workshop on Remote Sensing over Urban Areas (Urban 2003), Berlin, Germany, May 2003.
- (71) Scientific Committee, Second International Workshop on the Analysis of Multitemporal Remote Sensing Images (Multitemp 2003), Trento, Italy, September 2003.
- (72) Scientific Committee, 4th International Workshop on Multiclassifier Systems (MCS 2002), Cambridge, England, June 2003.
- (73) Organizer and chairman of session on Image Processing Techniques at the International Symposium on Geoscience and Remote Sensing, Toronto, Canada, June 2002.
- (74) Scientific Committee, 2<sup>nd</sup> International Workshop on Pattern Recognition in Remote Sensing (PRRS), Niagara Falls, Canada, August 2002.
- (75) Program Committee, International Symposium on Geoscience and Remote Sensing (IGARSS '2002), Toronto, Canada, June 2002.
- (76) Scientific Committee, 3rd International Workshop on Multiclassifier Systems (MCS 2002), Sardinia, Italy, June 2002.
- (77) Program Committee, Fusion of Earth Data, Sophia Antipolis, France, Jan. 2002.
- (78) Technical Committee, IEEE/ISPRS Joint Workshop on Remote Sensing over Urban Areas (Urban 2001), Rome, Italy, Nov. 2001.
- (79) Scientific Committee, First International Workshop on the Analysis of Multitemporal Remote Sensing Images (Multitemp 2001), Trento, Italy, September 2001.
- (80) Co-Chairman, European Symposium on Remote Sensing, Conference on Image and Signal Processing VII, Toulouse, France, September 2001.
- (81) Program Committee, International Symposium on Geoscience and Remote Sensing (IGARSS '2001), Sydney, Australia, July 2001.
- (82) Scientific Committee, 2<sup>nd</sup> International Workshop on Multiclassifier Systems (MCS 2001), Cambridge, U.K., July 2001.
- (83) Program Committee, Geo-Spatial Knowledge Processing for Natural Resource Management, University of Insubria, Varese, Italy, June 2001.
- (84) Scientific Committee, 1st International Workshop on Multiclassifier Systems (MCS 2000), Cagliari, Italy., June 2000.
- (85) GRSS Representative, The First International Microwave Radiometer Calibration Workshop, October 30-31, University of Maryland Inn and Conference Center, Maryland, USA.
- (86) Scientific Committee, 1st International Workshop on Pattern Recognition in Remote Sensing (PRRS), Andorra, Spain, August 2000.
- (87) Co-Chairman, European Symposium on Remote Sensing, Conference on Image and Signal Processing VI, Barcelona, Spain, September 2000.
- (88) Program Committee, International Symposium on Geoscience and Remote Sensing (IGARSS '2000), Hawaii, USA, July 2000.
- (89) Program Committee, Fusion of Earth Data, Sophia Antipolis, France, Jan. 26-28, 2000.
- (90) Co-Chairman, European Symposium on Remote Sensing, Conference on Image and Signal Processing V, Florence, Italy, September 1999.
- (91) Program Committee, International Symposium on Geoscience and Remote

- Sensing (IGARSS '99), Hamburg/Germany, June/July 1999.
- (92) Workshop on Intelligent Techniques for Spatio-Temporal Data Analysis in Environmental Applications Chania, Greece, July 1999.
  - (93) Program Committee, International Symposium on Geoscience and Remote Sensing (IGARSS '98), Seattle, WA, July 1998.
  - (94) Scientific Committee, European Symposium on Remote Sensing, Conference on Image and Signal Processing IV, Barcelona, Spain, September 1998.
  - (95) Organizer and chairman of a session on Data Fusion at the International Symposium on Geoscience and Remote Sensing, Singapore, August 4 - 8, 1997
  - (96) Organizer of a session on Data Fusion at the International Symposium on Geoscience and Remote Sensing, Seattle, WA, July, 1998.
  - (97) Organizer and chairman of session on Data Fusion at the International Symposium on Geoscience and Remote Sensing, Hamburg, Germany, June/July 1999.

**Member of Professional Societies:**

Fellow, The Institute of Electrical and Electronics Engineers, Inc. (IEEE),  
Fellow, The International Society for Photonics and Optics (SPIE)  
Member, Association of Chartered Engineers (VFI) in Iceland.  
Member, Societas Scientiarum Islandica