

Curriculum Vitae



Personal information

First name(s) / Surname(s) **Necip Gökhan KASAPOĞLU**
Address(es) Istanbul Aydin University, Department of Electrical and Electronics Engineering
Telephone(s) 444 1 428 / ext. 22501
Fax(es)
E-mail gokhankasapoglu@aydin.edu.tr
Web <https://ebs.aydin.edu.tr/index.iau?Page=BolumGenelBilgiler&BK=30&In=tr>

Nationality Turkish
Date of birth 1973
Gender Male

Research Interest

Remote Sensing, Image Processing, Synthetic Aperture Radar (SAR), Pattern Recognition, Machine Learning, Data Fusion.

Work experience

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| Dates | September 2014 – |
| Occupation or position held | Assistant Professor |
| Main activities and responsibilities | # Courses given Introduction to Electrical and Electronics Engineering, Digital Signal Processing, Signals and Systems, Analog and Digital Communication, Probability and Random Variables, Image and Signal Processing, Machine Learning. |
| Name and address of employer | Istanbul Aydin University Faculty of Engineering, Electrical and Electronics Engineering Department Besyol Mah. İnönü Cad.No:38 Sefaköy 34295 Kucukcekmece/Istanbul Turkey |
| Dept. Web | http://www.ebs.aydin.edu.tr/index.iau?Page=BolumGenelBilgiler&BK=30 |
| University Web | http://www.aydin.edu.tr/ |
| Type of business or sector | Academics, research |
| Dates | September 2011 – September 2014 |
| Occupation or position held | Postdoctoral Research Fellow |
| Main activities and responsibilities | # Research Areas of Research: Optical and multi-frequency PolSAR data fusion for tropical forest monitoring |
| Name and address of employer | University of Tromsø Dept. of Physics and Technology, University of Tromsø, NO-9037 Tromsø, Norway |
| Dept. Web | http://en.uit.no/ansatte/organisasjon/hjem?p_dimension_id=88136&p_menu=42374 |

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| UIT Web | http://en.uit.no/startside |
| Type of business or sector | Academics, research |
| Dates | April 2009 – March 2011 |
| Occupation or position held | Visiting (Postdoctoral) Research Fellow |
| Main activities and responsibilities | # Research Areas of Research: Synthetic aperture radar data assimilation for sea-ice analysis and forecasting |
| Name and address of employer | Canadian Ice Service, Environment Canada 373 Sussex Drive E-3 Ottawa, ON Canada |
| Dept. Web | http://ice-glaces.ec.gc.ca |
| Type of business or sector | Operational Sea-Ice Analysis |
| Dates | December 1998 – September 2011 |
| Occupation or position held | Research Assistant / Research Associate |
| Main activities and responsibilities | # Research Areas of Research: Pattern recognition in remote sensing, classification of remote sensing images, synthetic aperture radar (SAR) processing, SAR RAW data compression, texture analysis in SAR images. # Teaching Assisted Courses: Remote Sensing, Microwave Engineering. |
| Name and address of employer | Istanbul Technical University, ITU Department of Electronics and Communication Engineering, Ayazaga Kampusu 34469 Maslak/ Istanbul Turkey |
| ITU Web | http://www.itu.edu.tr |
| Dept. Web | http://www.ehb.itu.edu.tr |
| Type of business or sector | Academics |
| Dates | January 2005 – July 2005 |
| Occupation or position held | Visiting Researcher |
| Main activities and responsibilities | # Research Areas of Research: Developing a new algorithm for classification of hyperspectral and multispectral remote sensing images |
| Name and address of employer | Purdue University School of Electrical and Computer Engineering 47907-2035, West Lafayette, IN, USA Research was performed with Prof. Dr. Okan K. Ersoy, under the management of ITU (6 months full pay leave) and Tincel Foundation (Ph.D. Scholarship \$12.000) |
| Web | https://engineering.purdue.edu/ECE/People/profile?resource_id=3180 |
| Type of business or sector | Academics |
| Dates | December 2001 – January 2005 |
| Occupation or position held | Senior System Engineer |
| Main activities and responsibilities | #System Engineering Data Acquisition and Data Processing Systems in the Ground Receiving Station. # Research SAR (Synthetic Aperture Radar) data processing, Classification of SAR Data (ERS 1/2 and Radarsat 1), Feature extraction techniques (Texture Analysis) for SAR Data. |
| Name and address of employer | ITU CSCRS Center for Satellite Communication and Remote Sensing Istanbul Technical University Ayazaga Kampusu 34469 Maslak/ Istanbul Turkey |
| Web | http://www.cscrs.itu.edu.tr |
| Type of business or sector | Remote Sensing Data (ERS 1/2, SPOT 2-4 and Radarsat 1) Provider and Research Center |
| Dates | November 1995 – November 1998 |

Occupation or position held Project Engineer
 Main activities and responsibilities # Preparing offers, Developing solutions for security systems.
 Name and address of employer Boran Elektronik A.S.
 Halaskargazi Cad.
 Sisli/ Istanbul Turkey
 Type of business or sector Security Systems.

Dates — **September 1996 – June 1998**

Occupation or position held Lecturer [Part Time]
 Main activities and responsibilities Giving programming courses.
 Name and address of employer ISTEK Foundation, Bilge Kagan High School
 Istasyon Cad. Florya/Istanbul Turkey
 Type of business or sector Training

Education and training

Dates — **2000 - 2007**

Title of qualification awarded Ph.D. in Electronics and Communication Engineering
 Principal subjects/occupational skills covered Signal Processing and Pattern Recognition in Remote Sensing.
 Name and type of organisation providing education and training Istanbul Technical University
 Web: <http://www.itu.edu.tr>

Dates — **1997 - 2000**

Title of qualification awarded M.Sc. in Electronics and Communication Engineering
 Principal subjects/occupational skills covered Information Theory, Data Compression.
 Name and type of organisation providing education and training Istanbul Technical University
 Web: <http://www.itu.edu.tr>

Dates — **1990 - 1995**

Title of qualification awarded B.Sc. in Electronics and Communication Engineering
 Principal subjects/occupational skills covered Electromagnetic, Antennas and Propagation.
 Name and type of organisation providing education and training Yildiz Technical University
 Web: <http://www.yildiz.edu.tr>

Personal skills and competences

Mother tongue(s) **Turkish**

Other language(s) **English**

Social skills and competences Good team player (Sharing knowledge with team players to make improvements further).
 Good ability to adapt to multicultural environments.
 Experience in project coordination and communication (ability to plan and follow a timeline, engage and follow up with others, etc.).
 Skills within an interdisciplinary multi-tasking team.

Organisational skills and competences Member of IEEE Geoscience and Remote Sensing Society.
 Voluntary reviewer of IEEE Transactions on Geoscience and Remote Sensing, IEEE Geoscience and Remote Sensing Letters and IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
 Local organisation committee member of URSI - Turkey 2002 First National Conference.

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| Technical skills and competences | Experience with Kongsberg Spacotech SAR Processor, Experience with ENVI, ERDAS, and PCI Geomatica. Maintaining personal computers and some electronics devices. |
| Computer skills and competences | Programming Skills: C/ C++, Matlab, Pascal. Operating Systems: Windows, Linux, Irix, Solaris. |
| Artistic skills and competences | Taking photographs, Writing poems. |
| Driving licence | Category B |

References

List of Publication

International Journal Papers

- [1] N.G. Kasapoglu, "[Sea ice concentration retrieval using composite ScanSAR features in a SAR data assimilation process](#)," *IEEE Geosci. Remote Sens. Lett.*, vol.11, no.12, pp. 2085-2089, Dec. 2014.
- [2] N.G. Kasapoglu, O.K. Ersoy and S. Kent, "[Border feature detection and adaptation algorithm in consensual decision making](#)," *Int. J. of Remote Sens.*, vol. 30, no. 7, pp. 1829–1852, Apr. 2009.
- [3] N.G. Kasapoglu and O.K. Ersoy, "[Border vector detection and adaptation for classification of multispectral and hyperspectral remote sensing images](#)," *IEEE Trans. Geosci. Remote Sens.*, vol. 45, no.12, pp. 3880-3893, Dec. 2007.

International Conference Papers

- [1] N.G. Kasapoglu, T. Eltoft, "[Decision fusion of classifiers for multifrequency PolSAR and optical data classification](#)," In *Proc. RAST 2013*, Recent Advances of Space Technologies, Istanbul, Turkey, pp. 411-416, pp. 12-14 June 2013.
- [2] N.G. Kasapoglu, V. Kocabas, "[Flood damage assessment for cultivated lands: BVDA based adaptive thresholding and local statistics](#)," In *Proc. RAST 2013*, Recent Advances of Space Technologies, Istanbul, Turkey, pp. 97-102, 12-14 June 2013.
- [3] N.G. Kasapoglu, S.N. Anfinsen and T. Eltoft, "[Fusion of optical and multifrequency PolSAR data for forest classification](#)," In *Proc. IGARSS 2012*, IEEE Geoscience and Remote Sensing Symposium, Munich, Germany, pp. 3355-3358, 22-27 July, 2012.
- [4] N.G. Kasapoglu, "Sea ice concentration retrievals by using composite ScanSAR features in a SAR data assimilation process," In *Proc. SEASAR 2012*, Tromsø, Norway, pp. 259-265 , 18-22 June, 2012.
- [5] N.G. Kasapoglu, "[Synthetic aperture radar data assimilation for sea-ice analysis](#)," In *Proc. IGARSS 2011*, IEEE Geoscience and Remote Sensing Symposium, Vancouver, Canada, pp. 4435-4438, 24-29 July, 2011.
- [6] N.G. Kasapoglu, "[Synthetic aperture radar feature selection for dual polarized ScanSAR data](#)," In *Proc. RAST 2011*, Recent Advances of Space Technologies, Istanbul, Turkey, pp. 370-374, 9-11 June 2011.
- [7] N.G. Kasapoglu, "[Synthetic aperture radar and passive microwave analysis fusion](#)," In *Proc. RAST 2011*, Recent Advances of Space Technologies, Istanbul, Turkey, pp. 360-364, 9-11 June 2011.
- [8] S. Kent, N.G. Kasapoglu and M. Kartal, "[Radar target classification based on support vector machines](#)," *In Proc. RadarCon 2008*, IEEE Radar Conference, Roma, Italy, pp. 1-6, 26-30 May 2008.
- [9] N.G. Kasapoglu and O.K. Ersoy, "[Border feature detection and adaptation algorithm and its application in remote sensing](#)," In *Proc. RAST 2007*, Recent Advances of Space Technologies, Istanbul, Turkey, pp. 341-344, 14-16 June 2007..
- [10] S. Kent, M. Kartal, N.G. Kasapoglu and S. Kargin, "[Synthetic aperture radar raw data simulation for microwave remote sensing applications](#)," In *Proc. RAST 2007*, Recent Advances of Space Technologies, Istanbul, Turkey, pp. 389-392, 14-16 June 2007.
- [11] N.G. Kasapoglu, O.K. Ersoy and B. Yazgan, "[Feature Extraction of SAR Data Based on Eigenvector of Texture Samples](#)," In *Proc. IGARSS 2004*, IEEE Geoscience and Remote Sensing Symposium, Anchorage, USA, pp.3042-3045, 20-24 Sep. 2004.

- [12] N.G. Kasapoglu and B. Yazgan, "[Hierarchical Classification of SAR Data with Feature Extraction Method Based on Texture Features](#)," In *Proc. RAST 2003*, Recent Advances of Space Technologies, Istanbul, Turkey, pp. 355-358, 20-22 Nov. 2003.
- [13] N.G. Kasapoglu, B. Yazgan and F. Akleman, "[Hierarchical Decision Tree Classification of SAR Data with Feature Extraction Method Based on Spatial Variations](#)," In *Proc. IGARSS 2003*, IEEE Geoscience and Remote Sensing Symposium, Toulouse, France, pp. 3453-3455, 21-25 July 2003.
- [14] N.G. Kasapoglu., I. Papila, S. Kent and B. Yazgan, "Segmentation and classification of SAR data with co-occurrence matrix for texture features," In *Proc. EUSAR 2002*, 4th European Conference on Synthetic Aperture Radar, Cologne, Germany, pp. 717-720, June 2002.
- [15] N.S. Tezel, N.G. Kasapoglu and B. Yazgan, "Velocity imaging system for detection of moving scatters," In *Proc. ELECO 2001*, The 2nd International Conference on Electrical and Electronics Engineering, Bursa, Turkey, 7-11 Nov. 2001.
- [16] N.G. Kasapoglu, N. S. Tezel and B. Yazgan, "SAR raw data compression with DCT-BAQ," In *Proc. ELECO 2001*, The 2nd International Conference on Electrical and Electronics Engineering, Bursa, Turkey, 7-11 Nov. 2001.

Technical Reports

- [1] N G. Kasapoglu and O.K. Ersoy, "[Border feature detection and adaptation for classification of multispectral and hyperspectral remote sensing images](#)", Technical Report TR-ECE-07-06, Purdue University, February 2007.

Conference and Workshop Presentations

- [1] N.G. Kasapoglu, T. Eltoft, "Statistical modeling and fusion of multifrequency PolSAR features for improved rural area land cover classification," *URSI Commission F, Microwave Signatures 2013*, in Espoo (Helsinki), Finland, 28-31 Oct. 2013.
- [2] N. G. Kasapoglu, T.Carrieres and M. Buehner, "Modelling of synthetic aperture radar features for sea-ice analysis and forecasting," *the 3rd Radarsat-2 Workshop in Saint-Hubert*, Canada, Sept. 2010.
- [3] N.G. Kasapoglu, T. Carrieres and M. Buehner, "Modelling of synthetic aperture radar features (SAR) for sea-analysis and forecasting", *44th Annual CMOS Congress*, Ottawa, Canada, May 31- June 4, 2010.
- [4] N.G. Kasapoglu, T. Carrieres and M. Buehner, "Simulation of synthetic aperture radar (SAR) features by using forward models", *10th Canadian Ice Service Sea-Ice Coordination Meeting*, 14-16 Dec. 2009.
- [5] N.G. Kasapoglu, O.K. Ersoy and B. Yazgan, "Border Feature Detection and Adaptation for Classification of Remote Sensing Images", *IEEE Geoscience and Remote Sensing Symposium*, 31 July-04 August 2006, Denver, USA.