Curriculum Vitae



Personal information

Necip Gökhan KASAPOĞLU First name(s) / Surname(s)

Address(es)

Istanbul Aydin University, Department of Electrical and Electronics Engineering

Telephone(s)

444 1 428 / ext. 22501

Fax(es)

gokhankasapoglu@aydin.edu.tr E-mail ngkasapoglu@gmail.com

https://ebs.avdin.edu.tr/index.iau?Page=BolumGenelBilgiler&BK=30&In=tr Web

Turkish Nationality

1973 Date of birth

> Gender Male

Research Interest

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

Work experience

Dates

September 2014 -

Occupation or position held

Assistant Professor

Courses given

Main activities and responsibilities

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. Inönü 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

UiT Web http://en.uit.no/startsida

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

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

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Occupation or position held

Main activities and responsibilities

Preparing offers, Developing solutions for security systems.

Name and address of employer

Boran Elektronik A.S. Halaskargazi Cad.

Project Engineer

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

kills 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

nal skills | 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 Spacetech SAR Processor, Experience with ENVI, ERDAS, and PCI Geometica. 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, "<u>Decision fusion of classifiers for multifrequency PolSAR and optical data classification</u>," 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, "<u>Radar target classification based on support vector machines,</u>" <u>In Proc. RadarCon 2008</u>, 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. Kargın, "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, "<u>Hierarchical Classification of SAR Data with Feature Extraction Method Based on Texture Features</u>," 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, "<u>Hierarchical Decision Tree Classification of SAR Data with Feature Extraction Method Based on Spatial Variations</u>," 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, "<u>Border feature detection and adaptation for classification of multispectral and hyperspectral remote sensing images</u>", 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 seaice 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.