

CURRICULUM VITAE

Dr. PRASHANTH REDDY MARPU

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Khalifa University of Science and Technology
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Experience:

- 06/2018 - pres** Associate Professor at Khalifa University of Science and Technology, UAE.
- 06/2013-05/2018:** Assistant Professor at Masdar Institute of Science and Technology, UAE.
- 11/2011- 06/2013:** Researcher at Masdar Institute of Science and Technology, UAE, working on *Earth-observation data processing*.
- 06/2010- 11/2011:** Researcher at Dept. of Electrical and Computer Engineering, University of Iceland, Iceland working on *Remote sensing image processing*.
- 05/2009-06/2010:** Experienced Researcher position in EU funded Hyper-I-Net project as a **Marie Curie Fellow** with the Remote sensing group at the University of Pavia, Italy working on *Hyperspectral image processing*.
- 01/2007-04/2009:** Researcher in EU funded LIMES (Land Sea Integrated Monitoring for European Security) project, working on *Object-based image analysis for wide area monitoring* working at TU Freiberg, Germany.
- 03/2006-02/2008:** Researcher in EU funded GMOSS (Global Monitoring for Security and Stability) network, working on *Object-based approach for change detection using remote sensing data* working at TU Freiberg, Germany.
- 02/2006-11/2006:** Image analyst at Institute for Geology, TU Freiberg, Germany working on *Automatic counting of fission tracks in microscopic images*.
- 01/2006-12/2006:** Research Assistant at Institute for Geology, TU Freiberg, Germany working on *Structural analysis of geological rifts using remote sensing data*.

Education:

- 04/2009:** Freiberg University of Mining and Technology, Freiberg, Germany.
Received a “Doktor Ingenieur” Degree with “magna cum laude”.
- 03/2006:** Technical University of Denmark, Kongens Lyngby, Denmark.
Received a Master of Science Degree in Wireless Engineering
- 06/2003:** Jawaharlal Nehru Technological University, Hyderabad, India.
Received a Bachelor of Technology Degree in Electronics and Communications Engineering with distinction.

Fields of interest:

Image processing, remote sensing, multi/hyperspectral data processing, change detection, mathematical morphology, geosciences, environmental data analysis, CubeSats.

Publications

Journals:

- 1) R. Gloaguen, P. R. Marpu, I. Niemeyer, "Automatic Extraction of Faults and Fractal Analysis from Remote Sensing Data," *Nonlin. Processes Geophys.*, 14, 131–138, 2007.
- 2) J. G. M. Gonçalves, K. H. Gutjahr, C. Listner, P. Loreaux, P. R. Marpu, I. Niemeyer, A. Patrono, A. Ussorio, and E. Wolfart, "Integrated Analysis of Satellite Imagery for Treaty Monitoring - The LIMES Experience," *ESARDA Bulletin* 43, 2010.
- 3) P.R. Marpu, M. Neubert, H. Herold and I. Niemeyer, "Enhanced evaluation of image segmentation results," *Journal of Spatial Science*, Volume 55 Issue 1, 55, 2010.
- 4) A. Wijaya, P. R. Marpu, and R. Gloaguen, "Discrimination of peatlands in tropical swamp forests using dual-polarimetric SAR and Landsat ETM data," *International Journal of Image and Data Fusion*, 1: 3, 257-270, 2010.
- 5) P. R. Marpu, P. Gamba and M. J. Canty, "Improving change detection results of IR-MAD by eliminating strong changes," *IEEE Geoscience and Remote Sensing Letters*, 2011.
- 6) Y. Gao, P. Marpu, I. Niemeyer, D. Runfola, N. M. Giner, T. Hamill, "Object-based classification with features extracted by a semi-automatic feature extraction algorithm – SeaTH," *Geocarto International*, 2011.
- 7) G. Licciardi, P. R. Marpu, J. A. Benediktsson and J. Chanussot, "Linear versus non-linear PCA for the classification of hyperspectral data based on the extended morphological profiles," *IEEE Geoscience and Remote Sensing Letters*, 2012.
- 8) S. Bernabe, A. Plaza, P.R. Marpu and J. A. Benediktsson, "A new parallel tool for classification of remotely sensed imagery," *Computers and Geosciences*, 2012.
- 9) P. R. Marpu, M. Pedernana, M. Dalla Mura, S. Peeters, J. A. Benediktsson, L. Bruzzone, "Classification of hyperspectral data using extended attribute profiles based on supervised and unsupervised feature extraction techniques," *Intl. J. of Image and Data Fusion*, 2012.
- 10) P. R. Marpu, M. Pedernana, M. Dalla Mura, J. A. Benediktsson and L. Bruzzone, "Automatic generation of standard deviation attribute profiles for spectral-spatial classification of remote sensing data," *IEEE Geosc. and Remote Sensing Letters*, 2012.
- 11) M. Pedernana, P. R. Marpu, M. Dalla Mura, J. A. Benediktsson and L. Bruzzone, "Classification of Remote Sensing Optical and LiDAR Data Using Extended Attribute Profiles," *IEEE Journal of Selected Topics in Signal Processing*, 2012.
- 12) M. Pedernana, P. R. Marpu, M. Dalla Mura, J. A. Benediktsson and L. Bruzzone, "A Novel Technique for Optimal Feature Selection in Attribute Profiles Based on Genetic Algorithms," *IEEE Transactions on Geoscience and Remote Sensing*, 2013
- 13) J. Li, P. R. Marpu, A. J. Plaza, J. A. Benediktsson, "Generalized composite kernel framework for hyperspectral image classification," *IEEE Trans. on Geoscience and Remote Sensing*, 2013.
- 14) I. Dopido, J. Li, P. R. Marpu, A. J. Plaza, J. M. Bioucas Dias, J. A. Benediktsson, "Semi-Supervised Self Learning for Hyperspectral Image Classification," *IEEE Transactions on Geoscience and Remote Sensing*, 2013.
- 15) M. Lazzarini, P.R. Marpu, H. Ghedira, "Temperature-land cover interactions: the inversion of Urban Heat Island phenomenon in desert city areas," *Remote Sensing of Environment*, 2013.
- 16) Y. Eissa, P. R. Marpu, I. Gherboudj, H. Ghedira, T. B. M. J. Ouarda, M. Chiesa, "Artificial neural network based model for retrieval of the direct normal, diffuse horizontal and global horizontal irradiances using SEVIRI images," *Solar Energy*, 2013.
- 17) S. Bernabe, P.R. Marpu A. Plaza, M. Dalla Mura and J. A. Benediktsson, "Spectral-spatial classification of multispectral images using kernel feature space representation," *IEEE Geoscience and Remote Sensing Letters*, 2013.
- 18) M. Saini, B. Christian, N. Joshi, D. Vyas, P. R. Marpu and N.S.R. Krishnayya, "Hyperspectral Data Dimensionality Reduction and the Impact of Multi-seasonal Hyperion EO-1 Imagery on Classification Accuracies of Tropical Forest Species," *Phot. Engg. & Remote Sensing*, 2014.

- 19) S. Loutatidou, B. Chalermthai, P. R. Marpu, H. A. Arafat, "Capital cost estimation of RO plants: GCC countries versus southern Europe," *Desalination*, Volume 347, Pages 103-111, 2014.
- 20) T. B. M. J. Ouarda, C. Charron, K. N. Kumar, P. R. Marpu, H. Ghedira, A. Molini and I. Khayal, "Evolution of the rainfall regime in the United Arab Emirates," *Journal of Hydrology* 514, 258-270. 2014.
- 21) M. Lazzarini, P. R. Marpu, Y. Eissa, H. Ghedira, "Toward a Near Real-Time Product of Air Temperature Maps from Satellite Data and In Situ Measurements in Arid Environments," *IEEE Journal of Selected Topics in Applied Earth Obs. and Remote Sensing*, 2014.
- 22) M. Alobaidi, P. R. Marpu, T. B. M. J Ouarda, H. Ghedira, "Mapping of the solar irradiance in the UAE using advanced artificial neural network-ensemble." *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 2014.
- 23) T. B. M. J. Ouarda, C. Charron, J. Y. Shin, P. R. Marpu, A. H. Al-Mandoos, M. H. Al-Tamimi, H. Ghedira, T. N. Al Hosary, "Probability distributions of wind speed in the UAE." *Energy Conversion and Management*, 2015.
- 24) G. Basha, P.R. Marpu and T. B. M. J. Ouarda, "Long-term prediction of Temperature, Precipitation, and Soil moisture using non-stationary oscillation processes over the UAE region," *International Journal of Climatology*, 2015.
- 25) K. Jung, P.R. Marpu and TBMJ Ouarda, "Improved classification of drainage networks using junction angles and secondary tributary lengths." *Geomorphology*, 2015.
- 26) G. Basha, P.R. Marpu and T. B. M. J. Ouarda, "Tropospheric temperature climatology and trends observed over the Middle East," *Journal of Atmospheric and Solar-Terrestrial Physics*, 2015.
- 27) M. Alobaidi, P. R. Marpu, T. B. M. J Ouarda, and F. Chebana, "Regional frequency analysis at ungauged sites using a two-stage resampling generalized ensemble framework," *Advances in Water Resources*, 2015.
- 28) G. Basha, , D. V. Phanikumar, K. N. Kumar, T. B. M. J. Ouarda and P.R. Marpu, "Investigation of aerosol optical, physical, and radiative characteristics of a severe dust storm observed over UAE," *Remote Sensing of Environment*, 2015.
- 29) M. Lazzarini, A. Molini, P. R. Marpu, H. Ghedira and T. B. M. J. Ouarda, "Urban climate modifications in hot-desert cities: The role of land-cover, local climate and seasonality," *Geophysical Research Letters*, 2015.
- 30) S. Sanchez, P. Marpu, A. Plaza, and A Paz, "Parallel Implementation of Polarimetric Synthetic Aperture Radar Data Processing for Unsupervised Classification Using the Complex Wishart Classifier," *IEEE Journal of Selected Topics in Applied Earth Obs. and Remote Sensing*, 2015.
- 31) N. Falco, P.R. Marpu, and J.A. Benediktsson, "A Toolbox for Unsupervised Change Detection Analysis," *International Journal of Remote Sensing* 37(7), 1505-1526, 2016.
- 32) T. B. M. J. Ouarda, C. Charron, P. R. Marpu, and F. Chebana, "The Generalized Additive Model for the Assessment of the Direct, Diffuse, and Global Solar Irradiances Using SEVIRI Images, With Application to the UAE," *IEEE Journal of Selected Topics in Applied Earth Obs. and Remote Sensing*, 2016.
- 33) H. Ben-Romdhane, P. R. Marpu, T. B. M. J Ouarda, H. Ghedira, "Corals & benthic habitat mapping using DubaiSat-2: a spectral-spatial approach applied to Dalma Island, UAE (Arabian Gulf)," *Remote Sensing Letters Vol. 7, Iss. 8*, 2016.
- 34) R. Al Shehhi, P. R. Marpu, and W. L. Woon, "An Automatic Cognitive Graph-Based Segmentation for Detection of Blood Vessels in Retinal Images," *Mathematical Problems in Engineering*, vol. 2016.
- 35) A. Giwa, S. Daer, I. Ahmed, P. R. Marpu, and S. W. Hasan, "Experimental Investigation and Artificial Neural Networks Modeling of Electrically-Enhanced Membrane Bioreactor in Arid Regions," *Journal of Water Process Engineering*, 2016.

- 36) R. Gonzalez, T. B. M. J. Ouarda, P. R. Marpu, M. M. Allam, E. A. B. Eltahir, S. Pearson, "Water Budget Analysis in Arid Regions, Application to the United Arab Emirates," *Water* 8 (9), 415, 2016.
- 37) A. Afshari, F. Schuch, P. Marpu, "Estimation of the traffic related anthropogenic heat release using BTEX measurements—A case study in Abu Dhabi," *Urban Climate*, 2017.
- 38) R. Al Shehhi, P. R. Marpu, "Hierarchical graph-based segmentation for extracting road networks from high-resolution satellite images," *ISPRS Journal of Photogrammetry and Remote Sensing* 126, 245-260, 2017.
- 39) R. Al Shehhi, P. R. Marpu, W. L. Woon and M. Dalla Mura "Simultaneous extraction of roads and buildings in remote sensing imagery with convolutional neural networks," *ISPRS Journal of Photogrammetry and Remote Sensing* 130, 139-149, 2017.
- 40) K. Jung, P. R. Marpu and T. B. M. J. Ouarda, "Analysis of time of concentration for different river network types in arid and non-arid regions" *Arabian Journal of Geosciences*. 2018.
- 41) H. Ben-Romdhane, M. A. Al-Musallami, P. R. Marpu, T. B. M. J. Ouarda and H. Ghedira, "Studying the impact of El Niño 2015-2016 on a coral reef environment in UAE using remote sensing," *International Journal of Remote Sensing*, 2018.
- 42) P Manandhar, PR Marpu, Z Aung, "Segmentation based Traversing-Agent Approach for Road Width Extraction from Satellite Images using Volunteered Geographic Information," *Applied Computing and Informatics*, 2018.
- 43) N Liosis, PR Marpu, K Pavlopoulos, TBMJ Ouarda, "Ground subsidence monitoring with SAR interferometry techniques in the rural area of Al Wagan, UAE" *Remote Sensing of Environment* 216, 276-288, 2018.
- 44) SK Reddy, S Kumar, KM Varadarajan, PR Marpu, TK Gupta, M Choosri, "Strain and damage-sensing performance of biocompatible smart CNT/UHMWPE nanocomposites" *Materials Science and Engineering: C* 92, 957-968

Book Chapters:

- 1) P. R. Marpu, S. Nussbaum, I. Niemeyer and R. Gloaguen: "A Procedure for automatic object-based classification." In: T. Blaschke, S. Lang, and G. Hay (ed.): *Object-Based Image Analysis Spatial Concepts for Knowledge-Driven Remote Sensing Applications*. Series: Lecture Notes in Geoinformation and Cartography. Springer, Berlin, 2008.
- 2) I. Niemeyer, P. R. Marpu, and S. Nussbaum, Change detection using object features. In: Blaschke, T., Lang, S. & G. Hay (ed.), *Object-Based Image Analysis Spatial Concepts for Knowledge-Driven Remote Sensing Applications*. Series: Lecture Notes in Geoinformation and Cartography. Springer, Berlin, 2008.
- 3) A. Wijaya, P. R. Marpu, and R. Gloaguen. "Geostatistics texture classification of tropical rainforests in Indonesia." In Stein and Bijker (3d.): *Quality in spatial data mining*. CRC Book Series, 2008.
- 4) K. Bakos, P. R. Marpu and P. Gamba. "Decision fusion of multiple classifiers for hyperspectral data classification." In S. Prasad, L. M. Bruce and J. Chanussot (Eds.) *Optical Remote Sensing. Advances in Signal Processing and Exploitation Techniques*. Augmented Vision and Reality Series, Vol. 3, 1st Edition. 2011.
- 5) A. Tsoupos, M. Jha, P. R. Marpu, "Plug and Play IoT architectures", in the book "*The Philosophy of Mission-Oriented Wireless Sensor Networks*" Springer (2018).
- 6) Mukesh Jha, Alexandros Tsoupos, Prashanth Reddy Marpu, "Urban microclimate monitoring using Internet of Things based architecture", In the book "*The Philosophy of Mission-Oriented Wireless Sensor Networks*" Springer (2018)

Recent Conferences:

Full papers

1. F. Schuch, A. Afshari, P. Marpu, D. Masri, Estimation of the urban heat island using remotely sensed thermal infrared data, Applied Energy Symposium on Low Carbon Cities and Urban Energy, Singapore. 2017.
2. N. Liosis, P. R. Marpu, K. Pavlopoulos, T. Ouarda, "Observations of Land Subsidence Phenomena in an Agricultural Area of the UAE" *FRINGE 2017*, Helsinki, Finland, 2017.
3. P. Manandhar, P. R. Marpu and Z. Aung, "Segmentation based building detection in high resolution satellite images" IGARSS 2017, Fortworth, TX, USA.
4. H Ben-Romdhane, PR Marpu, H Ghedira, TBMJ Ouarda, 2016. Mapping of coral reef environment in the Arabian Gulf using multispectral remote sensing. WG VIII/9 - Coastal and Ocean Applications. XXIII International Society for Photogrammetry and Remote Sensing (ISPRS) Congress. 12-19 July, 2016. Prague, Czech Republic.
5. Nicola Falco, Gabriele Cavallaro, Prashanth Marpu, Jón Atli Benediktsson, unsupervised change detection analysis to multi-channel scenario based on morphological contextual analysis. IGARSS 2016, Beijing, China, 2016.
6. H Ben-Romdhane, MA Ahmed, PR Marpu, T Ouarda, S Sanchez, H Ghedira, 2016. Change detection in a coral reef environment in the Arabian Gulf using multispectral remote sensing. 13th International Coral Reef Symposium. 19-24 June 2016. Honolulu, Hawaii.
7. H Ben-Romdhane, PR Marpu, H Ghedira and TBMJ Ouarda, 2016. Mapping of Coral Reef Environment in the Arabian Gulf Using Multispectral Remote Sensing. UAE Graduate Studies Research Conference 2016. 20-22 Mar, 2016. UAEU, Al Ain, Abu Dhabi, UAE.
8. Prajowal Manandhar, Zeyar Aung, Prashanth Reddy Marpu and Sameh El Khatib, Extraction of Abu Dhabi Downtown Road Network from Satellite Images using Ensemble Machine Learning and Graph Theory Approach. UAE Graduate Studies Research Conference 2016. 20-22 Mar, 2016. UAEU, Al Ain, Abu Dhabi, UAE.
9. Nikolaos Liosis, Prashanth Marpu, Kosmas Pavlopoulos, and Taha Ouarda, Ground Deformation Monitoring in the presence of Low Coherence. An Example from Al Wagan. UAE Graduate Studies Research Conference 2016. 20-22 Mar, 2016. UAEU, Al Ain, Abu Dhabi, UAE.
10. Jung, K., T.B.M.J. Ouarda, P.R. Marpu, 2016, Regional frequency analysis based on new river network information in arid and semi-arid regions, UAE Graduate Studies Research Conference 2016. 20-22 Mar, 2016. UAEU, Al Ain, Abu Dhabi, UAE.
11. Mukesh Jha, Alexandros Tsoupos, Prashanth Reddy Marpu, Chi-Kin Chau, Peter Armstrong, "In-situ Sensor Network for Microclimate and Urban Energy Modeling and Validation." Proc. of ACM E-energy, Waterloo, Canada, 2016.
12. M. Jha, P. R. Marpu, Sid Chi-Kin Chau, and Peter Armstrong. Design of Sensor Network for Urban Micro-Climate Monitoring, 1st IEEE conference on International Smart Cities Conference (ISC2-2015).
13. Lindita Bande, Adalberto Guerra Cabrera, Prashanth Marpu, Afshin Afshari. Urban Smart Shading Devices based on Traditional Gulf Design. Case study located in a district on a hot-arid climate city (Abu Dhabi), 1st IEEE conference on International Smart Cities Conference (ISC2-2015)
14. M. Martin, A. Afshari, P. R. Armstrong, and P. R. Marpu. MOBO – An experimental network for urban heat island analysis in a green district of the Middle-East. 9th International Conference on Urban Climate, 2015.
15. R. Kambhampati, P. R. Marpu, P. Armstrong, and M. Martin. Observation of Urban Thermal Regime in Abu Dhabi city using Satellite Remote Sensing, 9th International Conference on Urban Climate, 2015.
16. M. Martin, L. Bande, P. Marpu, A. Afshari, M. A. Al-Musawa and G. R. Kolan. "Data Extraction as Input for the Energy Analysis of an Urban District with UMI." CIBMENA 2014 Conference "Smart, Sustainable and Healthy Cities"
17. P.R. Marpu, "Kernel principal components ensembles for efficient classification of large dimensional data." IGARSS 2014, Quebec City, Canada, 13-18 July, 2014.

18. S Martinez, PR Marpu and A Plaza, and A. Paz. "Efficient parallel implementation of polarimetric synthetic aperture radar data processing" Published in Proceedings Volume 9247: High-Performance Computing in Remote Sensing IV October 2014. SPIE conference, Amsterdam, October 3-5, 2014.
19. A. Oumbe, H. Bru, Z. Hassar, P. Blanc, L. Wald, Y. Eissa, P. Marpu, I. Gherboudj, H. Ghedira, D. Goffe, "On the improvement of MACC aerosol spatial resolution for irradiance estimation in the United Arab Emirates" 2013 ISES Solar World Congress, Cancun, 3-7 November, 2013

Abstracts/Talks

20. "Advanced Classification Methods for remote sensing image analysis" GIS and Remote Sensing Annual Scientific Forum hosted by Dubai Municipality, 18 December 2013.
21. "Change detection in optical remote sensing" GIS and Remote Sensing Annual Scientific Forum hosted by Dubai Municipality, 18 December 2013.
22. N Al meqbali, P. R. Marpu, R. Al Hashemi and H. Ghedira, "Real-time retrieval of dust emissions over the uae desert from sevir thermal bands" IGARSS 2013, Melbourne, 21-26 July, 2013.
23. P.R. Marpu, M. Lazzarini and H. Ghedira, "Canonical correlation analysis based fusion of infrared and thermal infrared data." IGARSS 2013, Melbourne, 21-26 July, 2013.
24. P.R. Marpu, M. Lazzarini, H. Ghedira, A.Molini, "Temperature trends in desert cities: how vegetation and urbanization affect the urban heat island dynamics in hyper-arid climates", AGU General Assembly 2013, San Francisco, 9-13 December 2013.
25. M. Lazzarini, P.R. Marpu, Y. Eissa, I. Gherboudj, H. Ghedira, "Air Temperature estimation from Land Surface temperature and solar Radiation parameters", EGU General Assembly 2013, Vienna (AUT), 7-12 April 2013.
26. Lazzarini, M., Marpu, P.R., Molini, A., Ghedira, H., Temperature trends in desert cities: how vegetation and urbanization affect the urban heat island dynamics in hyper-arid climates. Abstract# GC53A-1027 presented at AGU 2013 Fall Meeting, San Francisco, Calif. (9-13 December 2013).
27. Tuomiranta, A., Marpu, P., Munawwar, S., Ghedira, H., Validation of thermal models for photovoltaic cells under hot desert climates. Abstract# 863 presented at ISES Solar World Congress 2013, Cancún, Mexico. (3-7 Nov, 2013).
28. "Hyperspectral Imaging for food quality assessment." Fourth Food Science Day, March 3, 2014, UAE University, Al Ain, UAE.
29. P.R. Marpu and S.S. Martinez, "Spectral-spatial classification using ensemble of kernel PCA attribute profiles." GIS and Remote Sensing Annual Scientific Forum hosted by Dubai Municipality, 26-27 February 2015.
30. P.R. Marpu, Sensing and Modeling the Urban Microclimate Regime in Desert Cities, Arab-American Frontiers of Science Symposium, 2015. **(Invited talk)**
31. P.R. Marpu, Automatic Change Detection Methods in Remote Sensing, International Geoscience & Geomatics Conference. Manama, Bahrain, 2015. **(Keynote Speech)**
32. P.R. Marpu and TBMJ Ouarda, Non-Linear Models for Estimation of Solar Radiation from Satellite Images. 25th International Environmetrics Society (TIES) Meeting, Al Ain, 2015. **(Invited talk)**
33. P.R. Marpu, Urban Microclimate Regime in Desert Cities. GIS and Remote Sensing Annual Scientific Forum, Dubai, 2016.
34. P.R. Marpu, Unlocking the potential of CubeSats, Global Space Congress, Abu Dhabi, 2017. **(Invited talk)**
35. P.R. Marpu, Urban Microclimate Monitoring using Sensor Networks, IEEE VLSI-SoC 2017 conference, Oct 23 –25, 2017, Abu Dhabi, UAE. **(Keynote Speech)**

Fellowships and Grants:

- 1) Marie Curie International Incoming Fellowship (05/2009- 01/2011).
- 2) Co-PI of Project grant 110043021 "Change detection methods in optical remote sensing" funded by RANNIS (Icelandic Research Fund). (01/2011-12/2013).
- 3) University of Iceland research fund- Postdoctoral research grant 2011.

- 4) PI of Project grant on “Non-invasive Sensing using Hyperspectral imaging.” (2013-2015).
- 5) PI of seed-funded project on “Novel sensor networks for urban microclimate monitoring” (2014).
- 6) PI of Masdar Institute- MIT Flagship Project on “Urban Microclimate Modeling.” (2014 – 2017).
- 7) Co-PI of Masdar Institute- MIT Innovation Program grant on “Low cost algal bloom sensing device.” (2014-2015).
- 8) PI of the Masdar Institute PhD Student Support Grant on “Land deformation monitoring using SAR interferometry.” (2015 – 2017)
- 9) PI of the Masdar Future Energy Company grant on “Spectral and temporal characteristics of dust deposition on solar panels.” (2016-2017)
- 10) Co-PI of project on development of academic program on *Space Systems and Technology* at Masdar Institute funded by Al Yah Satellite Company, Abu Dhabi and supported by Orbital ATK, USA. (2016- 2019)
- 11) PI of the small satellite development project on “Measurements of Atmospheric Methane and Carbon” funded by UAE Space Agency. (2017-2019)
- 12) Co-PI of pilot project on “Development of LULC maps for Abu Dhabi Emirate” funded by UAE Space Agency. (2017-2018)
- 13) Co-PI of project on “Assessing the Health and Potential for Blue Carbon Storage of the Abu Dhabi Mangrove System” funded by ADEK. (2018-2020).
- 14) PI of the “UAE MiniSat Competition” funded by UAE Space Agency (2018-2020).

Other:

- 1) Reviewer for IJRS (2007-), Math. Geosci. (2007-09), IGARSS proceedings (2008-), TGRS (2009-), JAST (2009), IEEE GRSL (2010-), IJDF (2010-), IEEE JSTARS (2011-), Comp. and Geosciences (2012-), Proceedings of IEEE (2012-), JDE (2012-), Remote Sensing (2012-), etc.
- 2) President and founder member of the IAMG Student Chapter at TU Freiberg (2006- 08).
- 3) Chair of Organization of MATGEOS 2008, First workshop on Mathematical Geosciences, 2008.
- 4) Organization of the third Hyper-I-Net Summer School on Hyperspectral imaging. Sep 8-11, 2009.
- 5) Awarded the **Best Reviewer** recognition for 2012 by IEEE Geosc. and Remote Sensing Letters.
- 6) Received the **Best Paper Award** from Intl. Journal of Image and Data Fusion for 2012-2013.
- 7) Elevated to IEEE senior member grade in 2014.
- 8) Founding member and chair of IEEE Geoscience and Remote Sensing Society UAE chapter.
- 9) Member of Organizing Committee of Middle East Geospatial Forum, 2015, 2016.
- 10) Chair of Organization of Joint Urban Remote Sensing Event, 2017.
- 11) Member of the Steering Committee of IEEE Environment Engineering Initiative.
- 12) Guest Editor for the IEEE Journal of Special Topics in Applied Earth Observations and Remote Sensing (JSTARS)
- 13) Associate Editor for the *Remote Sensing* Journal.

Student Supervision:

Current: 2 PhD students (2 as co-advisor), 2 MSc students (as main supervisor),

Past: 5 PhD students (3 as main supervisor and 2 as co-advisor) and 13 MSc students (8 as main supervisor and 9 as co- advisor)\

Personal details:

Date of Birth: 12th March, 1982

Nationality: Indian

Languages: I can speak fluently and write English, Hindi and Telugu.

Memberships: IEEE GRSS

I certify that the provided information is right to the best of my knowledge and I am responsible for all the information.

Sincerely,

Dr. Prashanth Reddy Marpu