Dr. Mohd Anul Haq
Associate Professor, Computer Science

Education:

- Ph.D. Computer Science-AI, Indian Institute of Technology Roorkee, India, 2013
- Masters in Computer Science and Applications, Uttar Pradesh Technical University, Lucknow, India 2007
- BS HNB Garhwal Central University, Srinagar, India, 2004

Academic Experience:

Academic Appointments – College of Computer and Information Sciences, Majmaah University, Al-Majmaah, Saudi Arabia

| 4 Dec 2019 to till date | Associate Professor | Computer Science |

Academic Appointments – NIIT University, India

| 21 Dec 2017 to 3 Dec 2019 | Associate Professor | Computer Science |

Academic Appointments – NIIT University, India

| 12 Sep 2013 to 20 Dec 2017 | Assistant Professor | Computer Science |

Current Membership in Professional Organizations:
COSPAR Associate

ISG

ISRS

Ph.D. Supervised/Submitted: 3

1. Mohd Ramiz, Jamia Millia Islamia, India
2. Prashant Baral, NIIT University India
3. Abhijit Ghosh, NIIT University India

Project Funding/Grants

S.N.	Title	Sponsoring Agency	Project Duration	Grant awarded (Equivalent **SAR**)
1	Modeling of Crop Selection Based on Environmental and associated parameters using Machine Learning	Ministry of Education, KSA and Majmaah University	Nov 2020-Oct 2021	26,400
2	AI based Modeling the snow properties for their classification and identification	DST, Govt. of India	21 April 2016-01 Dec 2020	1,72,234
3	Understanding the Geomorphology of Martian Surface using Mars Orbiter Mission Datasets	Indian Space Research Organization, Govt. of India	10 Oct 2016-10 Oct 2019	89,000
4	Using Artificial Intelligence and Cloud Computing to Monitor Groundwater Resources in Rajasthan, India	Microsoft Inc. Redmond. US	06 April 2019 to 1 Dec 2020	45,000
5	Coupling GPR Measurements and ANN Modelling for Mountain Glacier Volume Assessment in India and Russia	DST-Russian Foundation of Science	2016	1,20,866
6	Development of Glacial Lake Monitoring Techniques in The Uttarakhand Himalayas Using Geomatics Techniques	NIIT University, India	15 Sep 2014-14 March 2016	18,532
7	Glacial Lake Monitoring Techniques in The Uttarakhand Himalayas Using Geomatics Technique ID: 29121	European Space Agency	17 Dec 2014 to 1 Nov 2015	40,000 (worth of ERS data)

Honors and Awards:

- Awarded the sponsorship and travel grant to participate at Microsoft AI for Earth Summit and Hackathon in Redmond, WA, US from Oct 14-17 2019 from Microsoft Inc.
- Awarded the sponsorship and travel grant to participate at 39th ACRS, Kuala Lumpur, Malaysia, 15-19 October, 2018.
- Best Teacher Award for 2015-16, awarded on Feb 23, 2016, NIIT University, India

- Selected for IEEE Travel funding for paper presentation in IEEE IGARSS, Melbourne, Australia, 21 to 26 July, 2013.
- Selected for DST Travel grant scheme to attend the 35th ISRSE Conference, Beijing, 22 to 26 April, 2013
- Won 1st Prize for best paper presentation in ESRI UC Dec 5-7, 2011, Noida, India.
- Selected for ISPRS Summer School sponsorship and travel funding, Burpha University, Thailand, Dec 2011.
- Research fellowship in Engineering and Technology from University Grants Commission (UGC), MANF, India (2010).
- Won EXplore Web Development Award conducted by Everest Infosoft Pvt. Ltd, 8 Dec, 2008.

Service Activities (within and outside of the institution):

Member, Academic Development Unit, College of Computer and Information Sciences, Majmaah University Saudi Arabia 2020

Member, Quality Unit, College of Computer and Information Sciences, Majmaah University Saudi Arabia, 2020

Curriculum Design committee- Master of Artificial Intelligence, Majmaah University, 2020

Member of Organizing Committee, Unmanned Aerial System in Geomatics (UASG-2021), Indian Institute of Technology Roorkee, India

Member of Organizing Committee, Unmanned Aerial System in Geomatics (UASG-2019), Indian Institute of Technology Roorkee, India

Member of Academic Council, 2014-2020, NIIT University, India

Member of Library Committee, 2015-2020, NIIT University, India

Member of Industrial Practice Committee, 2014-2020, NIIT University, India

Member of Convocation Committee, 2013-2019, NIIT University, India

Member of Grievance Redressal Committee, 2014-2016, NIIT University, India

Member of Mentors Committee, 2013-2019, NIIT University, India

Member of Doctoral Symposium Committee, NIIT University, 2018-2019

Chief Coordinator of 7th Annual Lecture, Nov 2015

Selected Publications and Presentations (Past 5 years):

1. Baral P, **Haq, M. A.** (2020) Spatial prediction of permafrost occurrence in Sikkim Himalayas using logistic regression, random forests, support vector machines and neural networks, Geomorphology**,** https://doi.org/10.1016/j.geomorph.2020.107331 (ISI; IF 3.81; Q1)

2. **Haq, M. A.,**Baral P, Yaragal S, Rahaman G**.** (2020) Assessment of trends of land surface vegetation distribution, snow cover and temperature over entire Himachal Pradesh using MODIS datasets. Natural Resource Modeling.https://doi.org/10.1111/nrm.12262 (ISI; IF 0.9; Q3)

3. **Haq, M.A.,** Rahaman, G., Baral, P. (2020). Deep Learning Based Supervised Image Classification Using UAV Images for Forest Areas Classification. Springer, JISRS https://doi.org/10.1007/s12524-020-01231-3 (ISI; IF 1.1; Q4)

4. **Haq, M. A.,**Baral P. (2019)Study of permafrost distribution in Sikkim Himalayas using Sentinel-2 satellite images and logistic regression modelling, Geomorphology, 333(123-136), https://doi.org/10.1016/j.geomorph.2019.02.024. (ISI; IF 3.81; Q1)

5. **Haq, M. A,**Ghosh, A, Rahaman, G, Baral, P.(2019) Artificial neural network based modeling of snow properties using field data and hyperspectral imagery. Natural Resource Modeling. 2019; https://doi.org/10.1111/nrm.12229 (ISI; IF 0.9; Q3)

6. Mangan P, **Haq, M. A.,** Baral P. (2019) Morphometric analysis of watershed using remote sensing and GIS—a case study of Nanganji River Basin in Tamil Nadu, India. Arabian Journal of Geosciences, https://doi.org/10.1007/s12517-019-4382-4 (ISI; IF 1.5; Q3)

7. Baral, P, **Haq, M.A**, Yaragal, S. (2019) Assessment of rock glaciers and permafrost distribution in Uttarakhand, India. Permafrost and Periglac Process.1– 26. https://doi.org/10.1002/ppp.2008 (ISI; IF 2.7; Q1)

8. Ramiz M, Siddiqui M A, Haq MA (2019) Surface Velocity Measurement of Satopanth and Bhagirathi Kharak Glacier in Garhwal Himalaya Using SAR Data and Its Application for the Ice-Thickness Measurement, AGUFM, C31B-1515 (Scopus; IF 1.5; Q2)

9. **Haq, M. A.,** Jain, K. and Menon, K. P. R. (2015) Modelling of Gangotri glacier thickness and volume an Artificial Neural Network, International Journal of Remote Sensing, Vol 35, issue 14, 6035-6042, https://doi.org/10.1080/01431161.2014.943322. (ISI; IF 2.97; Q1)

10. Datta J, **Haq, M. A.,** Rahman G, Baral P,Ghariwala V. (2019) Recognizing Mosquito Breeding Zones Applying Machine Learning – A Comparative Study between Dense Urban Area of Khanjarpur, Roorkee& Urban Slum Area of Chingrajpara slum, Chhattisgarh Utilizing UAV Images. UASG (2019), IIT Roorkee, 6-7 April 2019. (Scopus Indexed Conference)

11. Rahaman G, **Haq M A,** Ghosh A,Baral P. (2019) Deep Learning Based Supervised Image Classification Using UAV Images for Forest Areas Classification, UASG (2019), IIT Roorkee, 6-7 April 2019. (Scopus Indexed Conference)

12. Tyagi D, **Haq M A,** Rahaman G, Baral P. (2019) Classification comparison between ANN and RF for urban slum region, UASG (2019), IIT Roorkee, 6-7 April 2019. (Scopus Indexed Conference)

13. Ramiz M, **Haq M A** (2019) Machine Learning based Classification of Natural Resources, NU Doctoral Symposium, 6-7 April 2019, NIIT University, Neemrana.

14. **Haq, M. A.**, Rahman G, Baral, P. and Sharma, A. (**2018).** Comparison of Machine Learning classification algorithms for crops identification using Sentinel-2A data sets, IEEE SSCI,

Symposium Series on Computational Intelligence, 18 - 21 November 2018, Bengaluru, India (Scopus Indexed Conference, IEEE)

15. **Haq, M. A.**, Abhijit Ghosh and Gazi Rahaman (2018) AI and Deep Learning for Snow Properties Modeling, 2nd AI and IoT Summit, Geospatial Media and Communications, June 5-6, New Delhi. (Scopus Indexed Conference)

16. **Haq, M. A.,** and Yoga, P.C.R. 2018. River Rejuvenation with the aid of AI for Sahibi watershed, IEEE SSCI, Symposium Series on Computational Intelligence, 18 - 21 November 2018, Bengaluru, India. (Scopus Indexed Conference, IEEE)

17. **Haq, M. A**and Ansari, S.I. (2018) Equatorial subsurface ice detection in the plains of southwest of Olympus Mons, Mars, 42nd COSPAR Scientific Assembly 2018, July 14-22 Pasadena, California,

18. **Haq, M. A**, Ansari, S. and Rahaman. G. (2018) Analysis of geomorphology of Arsia-Mons using MCC, VIKING, HIRISE and MOLA dataset, 42nd COSPAR Scientific Assembly 2018, 42nd COSPAR Scientific Assembly 2018, July 14-22 Pasadena, California.

19. Swain. S. and **Haq. M.A.** (2018) Site Suitability Analysis for A Greenfield Airport in Kolkata Using GIS and Remote Sensing, 39th Asian Conference on Remote Sensing (ACRS), Kuala Lumpur, Malaysia, 15-19 October,2018. (Scopus Indexed Conference)

20. Dey. P. and **Haq. M.A.** (2018) Ground Water Quality Assessment of Neemrana using geospatial Techniques, 39th Asian Conference on Remote Sensing (ACRS), Kuala Lumpur, Malaysia, 15-19 October,2018. (Scopus Indexed Conference)

21. Nayaz. S. M. and **Haq. M.A.** (2018) Identification of Optimum Path for Service Areas Using GIS Based Network Analysis: A Case Study of Jaipur, 39th Asian Conference on Remote Sensing (ACRS), Kuala Lumpur, Malaysia, 15-19 October,2018. (Scopus Indexed Conference)

22. Ansari. S. I. and **Haq. M.A**. (2018) Radar Imager for Mars' subsurface eXperiment: A High Resolution Ground Penetrating Radar for MARS, 39th Asian Conference on Remote Sensing (ACRS), Kuala Lumpur, Malaysia, 15-19 October,2018. (Scopus Indexed Conference)

23. **Haq, M. A** (2015) Glacier Change in Bhagirathi Ganga and Vishnu Ganga Basins Since 1968-2013, IGS 2015, ICIMOD and IGS, 1-6 March, Kathmandu. (Scopus Indexed Conference)

24. **Haq, M. A** (2015) Mass Balance and Volumetric Glacier Change Analysis from 1968 to 2010 using Remote Sensing Geodetic Method, IGS 2015, ICIMOD and IGS, 1-6 March, Kathmandu

25. Bagde N. and **Haq M. A**. (2019) ArcGIS indoors for NIIT University AC1 building, Esri India User Conference, Gurugram, Aug 28-29 2019.

26. Datta J, Paul P, **Haq M. A**. (2019) Geo-Psephological Analysis of Indian general election, 2019, Esri India User Conference, Gurugram, Aug 28-29 2019.

27. Ghosh A. and **Haq, M. A.** (2018) Transport Network Analysis using GIS Techniques,National Conference on Role of Geospatial Technologies in Good Governance &Sustainable Development17-19 February 2018, AMU

28. **Haq, M. A.,**and Farooq Azam (2017) Application of Artificial Neural Networks for Glacier Thickness Estimation in the Western Himalayas, India, NCHC-2017, IIScBanglore, Jan 23-25, 2017. (Scopus Indexed Conference)

29. **Haq, M. A.,**and Abhijit Ghosh (2017) Geo-Hydrological Study of Alwar District Using Remote Sensing And GIS Techniques, National Conference on Geoinformatics for Natural Resource Management, Jamia Millia Islamia, 7-8 February, 2017

30. **Haq, M. A**. (2016) Potentials and Applications of AI with Geospatial Technology, MLSU, Udaipur, March 19, 2016.
31. **Haq, M. A**. (2015) Understanding the geomorphology of Martian Surface using MOM datasets Mars Orbiter Mission (MOM) Announcement of Opportunity (AO) Science Workshop Space Applications Centre (SAC), ISRO, Ahmedabad, December 21-22, 2015.
32. **Haq, M. A**.,(2015) AI based Modeling the snow properties for their classification and identification, Science meeting of Airborne Hyperspectral Campaign in India, 30 September 2015 at Space Applications Centre, Ahmedabad

M.Tech. Thesis/Projects and BTech Projects Supervision
NIIT University, India
M.Tech. Projects Supervised : 29   B.Tech. Projects Supervised: 14

Professional Development Activities (most recent):
- Delivered a lecture as an invited keynote speaker on "Artificial Intelligence in Reliability and Maintenance" at Saudi Aramco, EWPD Reliability Forum on 06/09/2020.
- Delivered a lecture as an invited keynote speaker on "Artificial Intelligence and Machine Learning in Cryospheric Sciences" at Jamia Millia Islamia, UGC-HRDC on 17/10/2020.
- Invited and sponsored for Artificial Intelligence and Machine Learning for sustainable water resources, AI for Sustainability, Technology Foresight Group, Goa, Oct 4-5 2018.
- Invited and sponsored for Utilization of AI and IoT techniques in Geospatial Domain, 2nd AI and IoT Summit, Geospatial Media and Communications, June 5-6 2018, New Delhi.
- Invited and sponsored for Climate Change and Glaciers, 1st 3- Week Refresher Course in Climate Change (Inter-disciplinary), UGC-HRD Centre, JMI, New Delhi, March 04 2017.
- Invited and sponsored for National Conference on Geoinformatics for Natural Resource Management, Jamia Millia Islamia, Session: water resource Management, February 7-8, 2017
- Potentials and Applications of Geospatial Technology, MLSU, Udaipur, March 19, 2016.
- Reviewer, Taylor and Francis's RSL, 2020
- Reviewer, Taylor and Francis's IJRS, 2020.
- Reviewer, Taylor and Francis's Geocarto International, 2020.
- Reviewer, Wiley, Natural Resource Modeling, 2020.
- Reviewer, Journal of Engineering and Applied Sciences, 2020.
- Reviewer, Springer, JISRS, 2020.
- Reviewer, Springer, JMS 2013-2019
- Reviewer, Current Science, 2013-2020