10. Publications

A. Papers in Referred Journals

S . No.	Author(s) Year		Title	C o m p l e t e Reference of Journal
	Kumar, B., Lohani, B., a n d Pandey, G.	2018	Development of deep learning architecture for automatic classification of outdoor mobile LiDAR data	IJRS, Under Publication
	Kumar, B., 2018 Pandey, G., and Lohani , B. ,		A multi-faceted CNN architecture for automatic classification of mobile LiDAR data and an algorithm to reproduce point cloud samples for enhanced training	ISPRS, Final Revision
	Goel, S., Allison, K., and Lohani , B.	2018	Development and Experimental Evaluation of a Low-Cost Cooperative UAV Localization Network Prototype	A c t u a t o r Networks, 7, 42, 2018; doi:10.3390/
	Lohani, B., Singh, S., Chaudhary, D. and Nagarajan, B.	2018	A New Approach for Determination of Solar Potential Using Terrestrial Images	REMOTE SENSING LETTERS, 2018 VOL. 9, NO. 7, 636–645 https://doi.org/ 10.1080/2150704X. 2018.1452061
	B. Kumar, B., 2018 Yadav, M., Lohani, B., Singh, A. K.,		A two-stage algorithm for ground filtering of airborne laser scanning data	International Journal of Remote Sensing. DOI: 10.1080/01431161. 2018.1466074

Yadav, M., Singh, A. K., Lohani, B.,	2018	Computation of road geometry parameters using mobile LiDAR system	Remote Sensing Applications: Society and Environment, https://doi.org/ 10.1016/j.rsase. 2018.02.003
Lohani, B. and Ghosh, S.	2017	Airborne LiDAR Technology: A Review of Data Collection and Processing Systems	Proc. Natl. Acad. Sci., India, Sect. A Phys. Sci. https://doi.org/ 10.1007/ s40010-017-0435-9
Yadav, M., Singh A., and Lohani, B .,	2017	Extraction of road surface from mobile LiDAR data of complex road environment	International Journal of Remote Sensing 38(16), 4645-4672
A.Kealy, S. Goel; . V.Gikas,G. Retscher, c. Toth, D. G. Brzezinska, B. Lohani	2017	Cooperative localization of unmanned aerial vehicles using GNSS, MEMS inertial and UWB sensors	ASCE Journal of Surveying Engineering, Vol. 143, Issue 4 (November 2017)
Yadav, M., Lohani, B., Singh A., and Hussain, E.	2016	Identification of pole-like structures from mobile LiDAR data of complex road environment	International Journal of Remote Sensing, 2016, VOL. 37, NO. 20, 4748–4777 http://dx.doi.org/ 10.1080/01431161. 2016.1219462
Goel, S., Kealy, A., and Lohani , B. ,	2016	Cooperative UAS Localization using low cost sensors,	ISPRS Annals of Photogrammetry Remote Sensing and Spatial Information Science, ISPRS Congress, Prague, Czech Republic,
	Lohani, B., Lohani, B., and Ghosh, S. Yadav, M., Singh A., and Lohani, B., A.Kealy, S. Goel; V.Gikas,G. Retscher, c. Toth, D. G. Brzezinska, B.Lohani Yadav, M., Lohani, B., Singh A., and Hussain, E. Goel, S., Kealy, A., and Lohani,	Lohani, B., Lohani, B. and Ghosh, S. Yadav, M., 2017 Singh A., and Lohani, B., A.Kealy, S. 2017 V.Gikas, G. Retscher, c. Toth, D. G. Brzezinska, B. Lohani Yadav, M., 2016 Lohani, B., Singh A., and Hussain, E. Goel, S., Kealy, A., and Lohani, A., and Lohani, A., and Lohani, B.	Lohani, B., Lohani, B. and Ghosh, S. Yadav, M., Singh A., and Lohani, B., A.Kealy, S. Goel; V.Gikas, G. Retscher, c. Toth, D. G. Brzezinska, B. Lohani Yadav, M., 2016 Identification of pole-like structures from mobile LiDAR data of complex road environment Yadav, M., 2016 Identification of pole-like structures from mobile LiDAR data of complex road environment Yadav, M., 2016 Identification of pole-like structures from mobile LiDAR data of complex road environment Yadav, M., 2016 Cooperative UAS Localization using low cost sensors,

Yadav, M., Husain, A., Singh, A.K., Lohani, B.	2015	Pole-shaped object detection using mobile LiDAR data in rural road environments	ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume II-3/W5, 28 Sep – 03 Oct 2015, La Grande Motte, France
Goel, S., and Lohani, B.	2015	Relative Contribution and Effect of Various Error Sources on the Performance of Mobile Mapping System (MMS)	10.1007/
Lohani, B., Roshan, A, and Singh, A.	2015	Simulation of LIDAR Point Cloud for a Planet as Generated by Satellite Borne Laser Ranging Instrument	10.1007/
Dashora, A., Lohani, B., and Deb K.,	2014	Method of flight planning for airborne LiDAR using genetic algorithms	SPIE Journal of Applied Remote Sensing, Vol 8, No 1, page 083576, 2014. doi: 10.1117/1.JRS. 8.083576.
Goel, S, and Lohani, B.	2014	Error analysis of motion correction method for laser scanning of moving objects	Photogrammetry,

Gupta, S., and Lohani , B.	2014	Augmented reality system using LiDAR point cloud data for displaying dimensional information of objects on mobile phones	Photogrammetry, Remote Sensing and Spatial
Ghosh, S., and Lohani , B. ,	2014	Development and comparison of aerial photograph aided visualization pipelines for LiDAR data	Journal of Digital E a r t h ,
Dashora, A., Lohani, B., and Deb, K.	2014	Two-Step Procedure of Optimization for Flight Planning Problem for Airborne LiDAR Data Acquisition	Mathematical Modelling and
Ghosh, S., Lohani, B., Misra, N.	2014	A study-based ranking of LiDAR data visualization schemes aided by georectified aerial images	Geographic Information
Yadav, M., Goel, S., Singh, A. K., and Lohani , B.	2013	Mobile mapping system using laser scanner, GPS and IMU	

Dashora, A., Lohani, B. ,	2013	Turning mechanisms for airborne LiDAR and photographic data acquisition	Sens. 7(1), 073488
Goel, S. and Lohani, B.	2014	A Motion Correction Technique for Laser Scanning of Moving Objects	and Remote
Ghosh, S. and Lohani , B.	2013	Mining LiDAR data with spatial clustering algorithms	
Ghosh, S. and Lohani, B.	2012	Experimental evaluation of LiDAR data visualization schemes	ISPRS Ann. Photogramm. Remote Sens. Spatial Inf. Sci., I-2, 135-140, doi: 10.5194/ isprsannals- I-2-135-2012, 2012
Dashora, A., and Lohani , B .	2012	Compatibility of Sun Position Models and 3D Topographic Data for Prediction of Shadow Zones	Selected Topics in Applied Earth
Shukla, S. P., Yadav, S., Lohani, B., Biswas, S.	2012	Characterization of traffic noise for a typical Indian road crossing	
Biswas, S. and Lohani , B .	2012	Extraction of spatial parameters from classified LiDAR data and aerial photograph for sound modeling	Photogramm. Remote Sens.

Lohani, B. , and Kumar R.	2008	GPS-GDOP prediction in urban environment using LiDAR data	' '
Lohani, B., Bhatnagar, N., Aditya, R.	2008	Return pulse waveform simulation for LLRI onboard Chandrayan-1	,
Lohani, B. and Singh, R.,	2008	Effect of data density, scan angle, and flying height on the accuracy of building extraction using LiDAR data	International, Vol. 23, No. 2, April
Dashora, A., Lohani, B., Malik J. N.,	2007	A repository of earth resource information-CORONA satellite programme	
Lohani, B., Mason, D. C., Scott, T. R., and Sreenivas B.,	2006	Extraction of tidal channel networks from aerial photographs alone and combined with laser altimetry	Journal of Remote Sensing, 27(1),
Dashora, A, Sreenivas, B., Lohani, B., Mallik J. N., and Afroj,	2006	GCP collection for CORONA satellite photographs: Issues and Methodology	Remote Sensing,
Lohani, B., and Mason, D. C.,	2005	A case study on error identification and minimization in Airborne Altimetric LiDAR data	Journal of
Lohani, B., and Mason, D.C.	2001	Application of airborne scanning altimetric LiDAR to the study of tidal channel geomorphology	Photogrammetry

	Lohani, B., and Mason, D.C.	1998	Construction of a digital elevation model of the Holderness coast using the waterline method and airborne thematic mapper data.	Journal of Remote		
1. 2. F	following papers	s are at	review stage			
	Gupta, S., Vasardani, M., Winter, S., and Lohani, B.	2018	Conceptualizing social rules of negotiation among multiple vehicles and pedestrians for the right of way	Transportation Research Part F: Psychology and Behaviour		
	Kumar, B., Lohani, B., and Pandey G.	2017	Development of deep learning architecture for automatic classification of mobile LiDAR data	ISPRS		
	Kumar, A., Lohani, B., and Mishra, S.	2017	Need for technological intervention in Land Consolidation: A case study of the state of Uttar Pradesh (U.P.), INDIA	Land Use Policy		
	3.4. Following papers are being submitted in coming weeks					

The following papers/articles/reviews have been published in journals of repute/technical magazines/Web sites			
Panjabi, V., and Lohani, B.		A navigation system for the visually impaired using stereo vision	
Gupta, S., and Lohani , B .	2014	Augmented reality system for dimension augmentation on a mobile image using point cloud data	

Dashora, A, and Lohani , B.	2014	LiDAR flight planning: A new system for flight planning with minimal user intervention	
Ghosh, S., Lohani, B., a n d Dashora, A.	2013	A solution to map project area lying in two UTM zones	
Lohani, B., Goel, S., a n d Sharma, R.	2013	Scanning moving objects using LiDAR	LiDAR Magazine, Vol. 3, No. 5, 2013
Goel, S., Yadav, M., Singh, A. K., and Lohani, B.	2013	Making mobile mapping systems affordable	Cover Story in Geospatial Today, July, 2013, pp. 12-16
Lohani, B.	2012	Times to raise standards in Geospatial Education	Geospatial Today, June, 2012
Lohani, B.,	2010	Map India 2010- A review report	GIM International, May 2010, Volume 24, Issue 5,
Lohani, B. , and Mishra, R. K.	2009	LAS and LASUtility	GIM International, August 2009, Volume 23, Issue 8,
Lohani, B. et al.	2009	Autodesk-IITK Digital Innovation Lab: Towards a neew paradigm in engineering design and visualization	
Lohani, B. et al.	2009	Centre for archaeological sciences and technologies (CAST): Preserving and reconstructing the Heritage	· · · · · · · · · · · · · · · · · · ·
Mishra, R. K., Lohani, B. ,	2007	The reality behind a LiDAR simulator	Geospatial Today, November, 2007, pp 45-49

	Biswas, S., and Lohani, B. ,	2007	Improved Sound Modeling with High Resolution LiDAR Data	
I	Lohani, B.,	2007	Rain of Information from the Point Clouds of LiDAR	Story of the Week, IIT Kanpur Home Page, 2007
I	Lohani, B.,	2007	Immense help to all stakeholders: Interview with Dr. Brig. Siva Kumar	
I	Lohani, B.,	2007	LiDAR technology in India: Dominant trend	GIM International, 21(5), May 2007
I	Lohani, B.,	2007	Map World Forum 2007: a review	GIM International, 21(4), April 2007
	Ghosh, S., and Lohani, B. ,	2007	3D visualization of LiDAR data	GIM International, 21(2), 15-17
9	Lohani, B. , a n d Sreenivas, B.,	2006	Tracing of tidal channels through remote sensing	Geospatial Today, 5(3), December 2006
I	Lohani, B.,	2005	Reviewing aerial survey in India: Interview with Mr. K Kalyanraman	
	Lohani, B. , Agrawal, N., Agrawal, N.,	2004,	Airborne Altimetric LiDAR Simulator(invited paper).	GIS@development, 6(5), May 2004
	Lohani, B.,	2004	Geomatics Education in India: Interview with Dr. P S Roy	,
	Lohani, B., and Flood, M.,	2003	Airborne Altimetric LiDAR-Where does India stand?	'
	Spikes, J., and Lohani, B. ,	2003	Spatial Information Policy in India	GIM-International, 17(6), June 2003

Lohani, B. ,	2002	Book review :The GIS Book-by George B. Korte	Jr. Indian Society of Remote Sensing, 30(4), December 2002
Lohani, B. ,	2002	Book review :The GIS Book-by George B. Korte	GIM International, 6(8), August 2002
Lemmens, M., and Lohani, B. ,	2001	How India can benefit from airborne laser a I t i m e t r y : Geoinformation from LiDAR	,
Lohani, B.	2000	Airborne altimetric LiDAR	GIS@Developmen t, 5(3), April 2001
Lohani, B.,	2000	Hawai Uchai Mapak LiDAR ka Apada Prabhandhan main Prayog-Ek Vihangwalokan	technique 1(4),
Mason, D. C., Davenport, I.J., Lohani, B., Robinson, G.J., Flather, R.A. and Gurney, C.M.,	1998	Improving intertidal digital elevation models	LOIS Newsletter, Issue no. 12, March 1998

B. Papers published in International Archives/Conference Proceedings (including referred conference publications-shown as shaded- 10 in numbers)

S . No	Author(s)	Year	Title	C o m p l e t e Reference of Proceedings
	Goel, S., Kealy, A., and Lohani, B.	2017	A cooperative localization system for Unmanned Aerial Vehicles: Prototype development and analysis	Mobile Mapping
	Yadav, M., Singh, A. K., Lohani, B.,	2016	Road Geometry Parameters Computation using Mobile Terrestrial Laser Scanning.	In Proceedings of Transportation Planning and Implementation Methodologies for Developing Countries (12th TPMDC), IIT Bombay, December 19–21
	Goel, S., Kealy, A., and Lohani, B.	2016		2016, Portland
	Yadav, M., Husain, A., Singh, A. K., Lohani, B. ,	2015	detection using	Conference of Transportation Research Group of
	Kealy, A., Goel, S., Gikas, V., Guenther, R., Toth, C., Brzezinska, D., and Lohani, B.	2015	Cooperative Localization of UAVs using Low Cost GNSS and MEMS Inertial Sensors,	9th International Symposium on Mobile Mapping Technology (MMT 2015), December 9-11, 2015, Sydney, Australia.

Shukla, P., Goel, S., Singh, P. and Lohani, B.,	2014	Automatic geolocation of targets tracked by aerial imaging platforms using satellite imagery,	ISPRS Archives of Photogrammetry Remote Sensing and Spatial Information Science, Volume 40, Issue 1, pp 381-388,.
Lohani, B., Ghosh, S., and Dashora, A.	2013	Development of standards for airborne LiDAR data acquisition	_
Goel, S., Yadav, M., Singh, A. K., Lohani, B.,	2013	Land based mobile mapping system using LiDAR sensor	In Proceedings of India Geospatial Forum, Hyderabad, January 22–24. (Presentation published)
Lohani, B., Chacko, S., Ghosh, S., Shashidharan. S.	2012	Flash LiDAR based surveillance system	Proceedings of XXXII INCA Congress 2012,11-13 October 2012, Dehradun
Goel, S., Yadav, M., Singh, A. K., Lohani, B.	2012	Development of land based mobile mapping system	Proceedings of XXXII INCA Congress 2012,11-13 October 2012, Dehradun
Lohani, B.	2012	Laser scanning technologies for meeting the challenges of civil engineering projects	

Ghosh, S., and	2011	Heuristical feature	International
Lohani, B.		extraction from LiDAR data and their visualization	Archives of the Photogrammetry, Remote Sensing and
			Spatial Information Sciences on Laser Scanning 2011, 29-31 August 2011 The University of Calgary, Calgary, Alberta, Canada
Biswas, S., and Lohani, B.	2008	Development of high resolution 3D sound model with LiDAR data and air photo	International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences. Vol. XXXVII. Part B7. Beijing 2008
Lohani, B., Mishra, R. K.,	2007	Generating LiDAR data in laboratory: LiDAR simulator	International Archives of Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume 3, Issue Part 3/W52, p. 264-269 (2007)
Mishra, R. K., and Lohani , B. ,	2007	s of tware development approach to design	National conference on "Emerging Trends in Information Technology" 2007, SGITS Indore, INDIA, December 18-20, 2007.

Lohani, B., Kumar, R.,	2007	A model for GPS-GDOP prediction in urban environment using LiDAR data	International
Ghosh, S,. Lohani, B.,	2007		Proc. Of ISPRS Joint Workshop on Visualisation and exploration of Geospatial data, 26 – 29 June, 2007, Stuttgart, Germany
Lohani, B., Mishra, R. K.,	2007	altimetric LiDAR system to simulate	Proc. Of GI Forum International Conference, 3 – 6 July, 2007, Salzburg, Austria
Lohani, B., Reddy, P., and Mishra, R.,	2006	Airborne Altimetric LiDAR Simulator: An education tool	
Lohani, B., a n d Sreenivas, B.	2006	Tidal channel identification from remotely sensed data using shape and spectral characteristics	Photogrammetry, Remote Sensing and
Ghosh, S., and Lohani , B. ,	2007	-	Proceedings of Map World Forum 2007, Hyderabad, India

Lohani, B., and Singh, R.,	2007	-	Proceedings of Map World Forum 2007, Hyderabad
D. C. Mason, M. Marani, E. Belluco, A. Feola, R. Katzenbeisser, B. Lohani, M. Menenti, D. Paterson, T. Scott, S. Silvestri, C. Wang and H-J. Wang,	2004	LiDAR mapping of tidal marshes for ecogeomorphologi cal modelling in the TIDE project	Conference on Remote Sensing for
Lohani, B., Mason, D. C., Bist, H. S.,	2004	Semi-automatic Multi-Level Approach for Extraction of Tidal Channels from Aerial Photographs and Hyperspectral Data	·
Agrawal, N., Agrawal, N, Lohani, B. ,	2004	•	Proc. Of Map India 2004, 28-30 January, New Delhi.
Mason, D.C, Wang, H., and Lohani, B.	2002	Extraction of tidal channel networks from airborne scanning laser altimetry and aerial photography	International symposium on

Lohani, B.	2001		International conference
Lohani, B.	2000	Application of airborne altimetric LiDAR in disaster management: An overview	Sensing Annual
Lohani, B.	2000	A raster based approach for a u t o m a t i c quantification of drainage network geomorphology	society for Remote Sensing Annual Symposium, 21-22
Lohani, B., and Mason, D.C.	1999	Extraction of tidal channel networks from LiDAR data	Proc. of Fourth International Airborne Remote Sensing Conference & Exhibition, Ottawa, Canada, 21-24 June, 1999.
Mason, D.C., A min, M., Annan, J., Davenport, I. J., Flather, R. A., Gurney, C., Lohani, B., Robinson, G. J., and Smith, J.			Proc. of Land Ocean Interaction Study Final Annual Meeting, Norwich, UK 24 - 26 March, 1998. (Abstract)

Mason, D.C., A min M., Annan, J., Davenport, I. J., Flather, R. A., Gurney, C., Lohani, B., Robinson, G. J., and Smith, J.,	1998	Digital elevation models of the intertidal zone 2	Proc. of Land Ocean Interaction Study Final Annual Meeting, Norwich, UK 24 - 26 March, 1998. (Abstract)
Lohani, B., and Biswas, D.	1995	interdisciplinary tool	Proc. of Engineering Education in 21st century, Varanasi, India, 14 - 15 Jan. 1995. (Abstract)
Biswas, D., and Lohani, B.	1995	Mining in Antarctica.	Proc. of Engineering Education in 21st century, Varanasi. India, 14 - 15 Jan. 1995. (Abstract)
Lohani, B., Tiwari, R.S., and Dubey, O.P.	1993	A PC based package for image enhancement.	Proc. of National Symposium of Indian Society of Remote Sensing Guwahati, India, 25 - 28 Nov. 1993. (Abstract)

C. Papers presented in Conferences but Not Published

S . N o	Author(s)	Year	Title	Name and Place of conference
	Manohar Yadav, Ajai Kumar Singh and Bharat Lohani	2016	Road Geometry Parameters Computation using Mobile Terrestrial Laser Scanning	TPMDC 2016, IIT Bombay, Mumbai, 19-21 December 2016
	Dashora, A., and Lohani, B .	2013	LiDAR technology and a new method of flight planning for airborne LiDAR data acquisition	ISG-ISRS National Symposium, 4-6 December, 2013, Vishakapattnam
	Goel, S. and Lohani, B .	2013	Modelling errors in LiDAR based mobile mapping system for optimal selection of system components	ISG-ISRS National Symposium, 4-6 December, 2013, Vishakapattnam
	Yadav, M., Goel, S., Singh, A.K. and Lohani, B.	2013	Land based Mobile Mapping System using LiDAR sensor	India Geospatial Forum (IGF), January 22-24, 2013, Hyderabad, India
	Ghosh, S., and Lohani, B.	2012	development and	ISRS-ISG Joint Symposium, New Delhi, December 5 – 7, 2012
	Lohani, B., Palani, S., Muniya, and Balaji, N.	2011	Hydropower Survey using terrestrial laser scanning	2nd Innovative LiDAR Solutions Conference, Toronto, 31May – 3 June 2011
	Lohani, B., Manchawari, L.	2011	LASViewer-A LiDAR visualisation software	2nd Innovative LiDAR Solutions Conference, Toronto, 31May – 3 June, 2011

Lohani, B. Mishra, R. K B i s w a Susham.,	,	Limulator2.0: A simulator for LiDAR Education,	C A T C O N competition- XXI Congress The International Society for Photogrammetry and Remote Sensing, 3-11 July 2008 Beijing, China.
Lohani, B Mishra, R. K Biswas, S.		Development of airborne altimetric LiDAR simulator and its evaluation	
Ghosh, S., an Lohani, B.	d 2007	Development of a system for 3D visualization of LiDAR data	,
Ghosh, S., an Lohani, B.	d 2007	Three dimensional visualization of LiDAR data	National Institute of D e s i g n , Ahmedabad, Dec. 2007
Mishra, R. K Lohani, B. ,	., 2007	Object-oriented s of t w a r e engineering for designing an aerial survey LiDAR	Spatial India 2007-IT and GIS strategy for infrastructure, Jaipur, INDIA, October 25-26, 2007
Dikshit, O Lohani, B.	., 2004	Status of Education in Space Science at IITs and ISc	India-United States Conference and Exhibition on Space Science, application and Commerce, June 21-25, 2004, Bangalore
Ekta, A. Lohani, B.	., 2004	Registration of laser point clouds for a large and complex building,	Third International Symposium on New Technologies for Urban Safety of Mega Cities in Asia, 18-19 October 2004, Agra.