EKTA BARANWAL

Email: ektabaranwal01@gmail.com
Contact No: +91 9236022138, +91 9462702167
Contact Address: C/O Sher Singh Baghel, Flat No.612,
Architecture Block, Gateway College,
Sector-11, Sonipat, Haryana-131001

1. CAREER OBJECTIVE:

I am the person, full of curiosity and eager to explore about the things I like. I always try to find logic and creativeness in the conventional things. This nature of mine drove me towards my passion, which is all about Remote Sensing, GIS, and their applications in various fields, especially in urban areas. Being a passionate researcher, I always solicitous to share and edify my skills and wealth of knowledge in the field of remote sensing. Presently, I am looking forward for the post of **Assistant Professor** at an educational institution to elevate and enrich the knowledge of Remote Sensing among the posterity.

2. EDUCATION QUALIFICATIONS:

Degree	Year of Passing	% Marks/ CGPA	University/ Institute	Main Subject/ Specialization
Ph.D. in GIS & Remote Sensing	Pursuing		Faculty of Engineering, Jamia Millia Islamia, New Delhi	Developing a new approach for detection of impervious surfaces and extraction of buildings from satellite imageries
P.G. Diploma	2019	67.4	IGNOU	Urban Planning and Development
M.Tech	2018	9.02	Banasthali University	Remote Sensing
P.G. Diploma	2014	65	CDAC, Noida	Geoinformatics
B. Tech	2009	63.48	Moradabad Institute of Technology, Moradabad	Electronics & Communication
XII-Board	2004	62	Lal Bahadur Shashtri Balika Inter College, Mughalsarai (U.P. Board)	Physics, Chemistry, and Mathematics
X-Board	2002	62.83	Lal Bahadur Shashtri Balika Inter College, Mughalsarai (U.P. Board)	Science

3. TECHNICAL SKILLS:

Digital Image Processing, Remote Sensing and GIS Software's	ArcGIS, ERDAS IMAGINE and ER MAPPER, ENVI Classic, e-Cognition Developer, Agisoft Photoscan, Pix4D, CloudCompare
Others (GPS Device)	Trimble R3 DGPS and JUNO
Computer skills	Basics of .Net, Python, MS Office, SPSS, MATLAB

4. EMPLOYMENT EXPERIENCE:

Name of Organization	Period of Service	Designation	Nature of Duties Performed
IIRS, Dehradun	July, 2017 – May, 2018	Project Trainee	Damage Detection of Cultural Monuments through UAV image processing
Yukti	August, 2014 - June, 2016	GIS Analyst	Worked on projects: Beautification of Vrindavan Parikrama Marg, Water Body Conservation in Braj Region. Work did: Created GIS Database, Site Suitability Analysis for various services on parikrama Marg, Change Detection of land use and land cover, Study of Urban Sprawl

5. TEACHING AND ACADEMIC ENGAGEMENT:

	Typology	Institution/ Person	Topics
1.	Short lecture and Lab exercise	Department of Civil Engineering, Jamia Millia Islamia, New Delhi	To visualize depth of different features through two overlapped photographs using pocket stereoscope
2.	Delivered hands on training	Chaksu and Phagi block in Rajasthan	EPRIS mobile app (Asset Mapping)
3.	Prepared lectures	Dr. Poonam Seth Tiwari, IIRS, Dehradun	- Earth observation (EO) data for earthquake related damage - Pan-sharpening - Rule-based classification
4.	Prepared Lab exercise	Dr. Poonam Seth Tiwari, IIRS, Dehradun	- Georeferencing using ArcGIS - Digitization using ArcGIS and ERDAS Imagine - Buffer Analysis using ArcGIS - Image Interpretation using ERDAS Imagine - Supervised Classification using ERDAS Imagine - Texture Analysis using ERDAS Imagine - Change Detection using ERDAS Imagine
5.	Helped in Ph.D. Thesis	Ms. Sunanda Kapoor	Urban pattern changing in Mathura district
6.	Helped in M. Tech Thesis	Ms. Navneet Kaur	Explorative Advance Image Processing and Analysis Tool Design to support prevalent Remote Sensing Applications using MATLAB
7.	Helped in B. Tech Thesis	Ms. Tanu Gururai	Rapid Building Damage Assessment using Very High Resolution (VHR) Satellite Image

6. RESEARCH AND PUBLICATIONS:

	Typology	Topic	Presented/Published at	Remarks
1.	Research Paper	Spatiotemporal Analysis for urban pattern evolution in sacred district Mathura of India through K-means classification	International Journal of Town Planning and Management	Published ISSN: 2456-5253 (Online)
2.	Conference proceedings	Health monitoring and assessment of the cultural monument through unmanned aerial vehicle (UAV) image processing	Publisher: Springer	In Progress
3.	Paper Presentation	Health monitoring and assessment of the cultural monument through unmanned aerial vehicle (UAV) image processing	43rd National Systems Conference on Innovative and Emerging Trends in Engineering Systems NSC-2019 6th – 8th Dec-2019	---
4.	Conference proceedings	Application of Unmanned Aerial Vehicle (UAV) for damage assessment of a cultural heritage monument	Book Title: Proceedings of UASG 2019 Book Subtitle: Unmanned Aerial System in Geomatics Series Title: Lecture Notes in Civil Engineering Volume Number: 51 Publisher: Springer Nature	In Progress Chapter: 13 ISBN: 978-3-030-37392-4
5.	Poster Presentation	Unmanned aerial vehicle (UAV) for monitoring architectural health	1st International Conference of Unmanned Aerial System in Geomatics UASG-2019 6th – 7th April-2019	---
6.	Paper Presentation	Landsat-8 OLI/TIRS based Built-Up Index Suitability Analysis: A case study of Haryana, India	38th IIG Conference, Banasthali University held on 18- 20 March, 2017	Excellent analysis for quick assessment for built-up from satellite images
7.	Research Paper	Comparative Analysis of different image enhancement techniques for feature extraction	---	On going

		through Ultra-high-resolution imagery		
8.	Advanced Objective in Thesis	A case study on solid waste management system in Mathura city	Submitted in partial fulfillment of the requirements for the award of the degree of P.G. Diploma in Urban Planning and Development	---
9.	Advanced Objective in Thesis	UAV Data and Point Cloud Processing for Damage Assessment of Cultural Monuments	Submitted in partial fulfillment of the requirements for the award of the degree of M. Tech in Remote Sensing	---
10.	Advanced Objective in Thesis	Urban Water Body Change Detection (Case of Varanasi City)	Submitted in partial fulfillment of the requirements for the award of the degree of P.G. Diploma in Geoinformatics	---
11.	Advanced Objective in Thesis	Green-Bee"- A model for small agriculture area, using sensors for soil moisture, sunlight, and fire hazard	Submitted in partial fulfillment of the requirements for the award of the degree of B. Tech in Electronics & Communication	---
12.	Poster Presentation	UAV Data and Point Cloud Processing for Damage Assessment of Cultural Monuments	Presented in partial fulfillment of the requirements for the award of the degree of M. Tech in Remote Sensing	
13.	Paper Review	GIS Steering Smart Future for Smart Indian Cities by Anuj Tiwari & Dr. Kamal Jain, International Journal of Scientific and Research Publications 2014	Presented in partial fulfillment of the requirements for the award of the degree of M. Tech in Remote Sensing	---
14.	Paper Review	Smart city analysis using spatial data and predicting the sustainability by Thomas Joseph, International Journal of Computer Trends and Technology (IJCTT) 2014	Presented in partial fulfillment of the requirements for the award of the degree of M. Tech in Remote Sensing	---

| 15. | Seminar | Implications of Mobile Technology Usage on Learners in a Learning Process- Mobile Learning. | Submitted in partial fulfillment of the requirements for the award of the degree of B. Tech | --- |

7. SCHOLARSHIP:

- Merit cum mean scholarship from Banasthali Vidyapith, Rajasthan during M. Tech.

8. PROFESSIONAL TRAINING, SHORT TERM COURSES AND WORKSHOPS ATTENDED:

	Typology	Topics	Conducted By
1.	1-day workshop	Hydro-metrological Disaster Management	IIRS, Dehradun, Uttarakhand
2.	1-day workshop	Basic concepts of Field Geology	Dept. of Geology, Banasthali University
3.	1-week course	Close range photogrammetry and Terrestrial laser scanning	IIRS, Dehradun, Uttarakhand
4.	7-week course	GIS and Global Navigation Satellite System (GNSS)	IIRS, Dehradun, Uttarakhand
5.	1-week course	Hyperspectral Remote Sensing and its Applications	IIRS, Dehradun, Uttarakhand
6.	4-week course	Remote Sensing and Digital Image Analysis	IIRS, Dehradun, Uttarakhand
7.	3-days course	Entrepreneurship Awareness Camp	Coordinated by Moradabad Institute of Technology, Moradabad and Sponsored by National Science and Technology Entrepreneurship Development Board (NSTEDB) Department of Science and Technology, Government of India
8.	4-week training	C & I (Thermal Power Station)	NTPC, Dadri
9.	19-days training	Introduction of PDH/SDH based optical transmission system, Product Management cum Pre-Sales Management and Fundamental on Installation/Operation and Maintenance	Ordyn, Delhi
10.	23-days training	Embedded System	CETPA InfoTech Pvt. Ltd.

9. PROFESSIONAL MEMBERSHIP

- Life member of Indian Society of Remote Sensing (ISRS), Membership No. L-5317

10. ACHIEVEMENTS:

- Won 1rd prize in Card competition organized by COSMOS 2016, Banasthali University.
- Certificate of Achievement for "ISO 9001:2000 Internal Quality Auditor Training Program"

organized by India International Group and Moradabad Institute of Technology, U.P. held on 25-30 March, 2009.

11. ADMINISTRATIVE ROLES AND NON-ACADEMICS:

- Worked as Coordinator of Decoration Committee in COSMOS 2016, Banasthali University.
- Worked as active member of National Social Service (NSS) during B. Tech (2005-2009) at Moradabad Institute of Technology, Moradabad.
- Worked as Coordinator of Inauguration Committee in Annual Fest of B. Tech in 2009 at Moradabad Institute of Technology, Moradabad.

12. SUBJECT INTERESTS AND TEACHING COMPETENCY:

- Principles of Remote Sensing: Optical, Thermal, Microwave, and Hyperspectral Remote Sensing
- Digital Image Processing (DIP) and its application in Remote Sensing
- Photogrammetry
- GIS concepts
- Spatial modelling and management
- Global positioning system (GPS)
- Various applications of Remote Sensing and GIS
- Environmental Studies: Basics and Principles
- Environmental Impact Assessment (EIA): Basic concepts, process, and role of Remote Sensing and GIS in EIA.
- Project Management
- Research Methodology: Data analytics and Decision Science

Place: Sonipat, Haryana   Ekta Baranwal
Date: