



Yogender Yadav

Nationality: Indian **Date of birth:** 20 Jun 1996 **Gender:** Female

Phone number: (+39) 3509081871 **Email address:** yogender105@gmail.com

Work: SDG 11 Lab, Viale Mattioli, 39 Politecnico di Torino, 10125 Torino (Italy)

WORK EXPERIENCE

Visiting Researcher

University of New South Wales (UNSW) [Nov 2023 – Current]

City: Sydney

Country: Australia

- Implementation of Digital Twins for the city of Torino
- Design a methodology workflow for roof top extraction from point clouds to aid solar panel installation
- Design a methodology for the update of the facades of buildings

Website Administrator - Board of Directors

ISPRS Student Consortium [Jun 2022 – Current]

- Link students, young researchers, and professionals in different countries, who are interested in photogrammetry, remote sensing, and spatial information sciences

Visiting Researcher

Indian Institute of Technology (IIT) [May 2023 – Aug 2023]

City: Roorkee

Country: India

- Worked on the creation of digital twins with UAV- sensor-based datasets and their update to time

Visiting Research Scholar (ERASMUS+)

Technical University in Zvolen [Nov 2021 – Apr 2022]

Country: Slovakia

- Worked on research project "Applications of Unmanned Aerial Vehicles (UAV) photogrammetry and iPhone LiDAR for the forestry applications"

Internship

Azercosmos [Aug 2021 – Sep 2021]

City: Baku

Country: Azerbaijan

- Worked on project "Deforestation analysis of Tartar district in Azerbaijan with NDVI and random forest approach" with the Department of Earth Observation, Azercosmos

Student Representative, Faculty Council

Faculty ITC, University of Twente [Jan 2021 – Dec 2021]

City: Enschede

Country: Netherlands

- Represented student interests to the university authorities for year 2021

Assistant Manager

Zomato Media Pvt Ltd [Jun 2019 – Jul 2020]

City: Chandigarh

Country: India

- Led the B2B business team for the North India region from April'20 - July'20
- Managed the logistics operations in 20+ cities

Convenor, Hiking and Trekking Club

National Institute of Technology (NIT) [Jul 2018 – May 2019]

City: Kurukshetra

Country: India

- Organised trips and outings for the students and staff of NIT Kurukshetra
- Part of the organizing committee of the annual cultural fest " Confluence'19", the second-largest cultural fest in North India

Internship

Indian Institute of Remote Sensing (IIRS), Indian Space Research Organization (ISRO) [May 2017 – Jul 2017]

City: Dehradun

Country: India

- Worked on generating a 3D Pointcloud by Structurefrom Motion-based CRP and TLS Techniques
- Worked on the assessment of the role of Ground Control Points in co-registration of CRP and TLS point clouds by point-pair selection methodology and automatic co-registration algorithm

EDUCATION AND TRAINING

Ph.D. Researcher

Politecnico di Torino [Nov 2022 – Current]

City: Torino

Country: Italy

Website: <https://www.polito.it>

Field(s) of study: Urban and Regional Development

Thesis: Landscape goes Digital: 3D model production and implementation of Digital Twins for innovative Landscape Management

Link: <https://www.polito.it/personale?p=098663>

Master of Science - M.Sc.

Faculty ITC, University of Twente [Aug 2020 – Jul 2022]

City: Enschede

Country: Netherlands

Website: [itc.nl](https://www.itc.nl)

Field(s) of study: Geoinformation Science and Earth Observation with specialization in Geoinformatics

Final grade: 7.61/10.00

Type of credits: ECTS – Number of credits: 120

Thesis: Hybrid adjustment of UAS-based LiDAR and image data

Link: <https://essay.utwente.nl/92137/>

Bachelor of Technology in Civil Engineering
National Institute of Technology (NIT) [Jul 2015 – Jun 2019]

City: Kurukshetra

Country: India

Website: <https://nitkkr.ac.in/>

Field(s) of study: Civil Engineering

Final grade: 7.92/10.00

Type of credits: ECTS – Number of credits: 240

Thesis: Effect of Search Methods on Feature Selection with Hyperspectral Data

LANGUAGE SKILLS

Mother tongue(s): **Hindi**

Other language(s):

English

Italian

LISTENING C2 READING C2 WRITING C2

LISTENING A1 READING A1 WRITING A1

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2 SPOKEN PRODUCTION A1 SPOKEN INTERACTION A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Python Language - Basic knowledge / 3D-Modelling / LIDAR, Photogrammetry, and UAV sensors and platforms
/ Digital Twins / Experience in MATLAB, python, and R

PUBLICATIONS

Hybrid adjustment of UAS-based LiDAR and image data

[2023]

ISPRS GeoSpatial Week 2023, Cairo, Egypt

Link: <https://isprs-archives.copernicus.org/articles/XLVIII-1-W2-2023/633/2023/>

Integration of iPhone LiDAR with Quadcopter and fixed-wing UAV Photogrammetry for the Forestry Applications

[2023]

2nd International GEOBENCH workshop, Krakow, Poland

Deforestation analysis using Random Forest and interactive supervised classification approach

[2022]

11th IGRSM International Conference and Exhibition on Geospatial & Remote Sensing 2022

Effect of Search Methods on Feature Selection with Hyperspectral Data

[2021]

IEEE International Symposium on Geoscience and Remote Sensing (IGARSS 2021), Brussels, Belgium

Deep neural network-based predictive modeling of road accidents

[2020]

International Journal of Neural Computing & Applications

Role of Ground Control Points (GCPs) in Integration of Terrestrial Laser Scanner (TLS) and Close-range Photogrammetry (CRP)

[2020]

Book chapter part of the Lecture Notes in Civil Engineering book series (LNCE, volume 33)

A semi-automatic approach for roof-top extraction and classification from airborne lidar

[2019]

Seventh International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2019)

Comparative Analysis of SfM Based CRP and TLS for 3D Modelling of Various Types of Surfaces

[2017]

38th Asian Conference on Remote Sensing (ACRS 2017), New Delhi, India

HONOURS AND AWARDS

CIPA 2023 Spring School Scholarship

Rotary International Association - District 2071 Tuscany and the Rotary Club Firenze Sud [Mar 2023]

- Scholarship award by Rotary International Association - District 2071 Tuscany and the Rotary Club Firenze Sud to attend CIPA Spring School 2023

ITC Excellence Scholarship

University of Twente [Jul 2020]

- Awarded with ITC Excellence Scholarship worth €40,000 for two years to pursue a Master in Geoinformation Science and Earth Observation

Secondry Examination Scholarship

Government of India [Sep 2012]

- Awarded a Scholarship worth INR 10,000 and an Excellence Certificate for being in the top 0.1 percentile of students who passed the School Secondary examination

NETWORKS AND MEMBERSHIPS

IEEE GRSS

ISPRS Student Consortium

CIPA Emerging Professionals (CIPA EP)

RECOMMENDATIONS

Research Advisor

Name: Dr. Fabio Remondino

Email: remondino@fbk.eu

Research Advisor

Name: Prof. Sisi Zlatanova

Email: s.zlatanova@unsw.edu.au

Research advisor

Name: Dr. Francesco Nex

Email: f.nex@utwente.nl

Research Advisor

Name: Prof. Piero Boccardo

Email: piero.boccardo@polito.it

Research Advisor

Name: Dr. Bashar Alsadik

Email: b.s.a.alsadik@utwente.nl

Internship Advisor

Name: Dr. Martin Mokros
Email: m.mokros@ucl.ac.uk

Research Advisor

Name: Dr. Mahesh Pal
Email: mahesh.pal@nitkkr.ac.in

VOLUNTEERING

Team Member - CIPA Emerging Professionals (CIPA EP)

[Nov 2023 – Current]

Link: <https://www.cipaheritagedocumentation.org/cipa-ep/>

Website Administrator - ISPRS Student Consortium

[Jun 2022 – Current]

Link: <https://sc.isprs.org/about/board/>

Convenor, Hiking and Trekking Club, National Institute of Technology (NIT)

[Kurukshetra, India, Jul 2018 – May 2019]