Dr. Shirshendu LAYEK

Assistant Professor Data Science and Intelligence System IIIT Dharwad Oharwad, Karnataka

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Shirso.it7@gmail.com

Profile

I am a hard working, honest individual. I am always willing to learn new skills. I am friendly, helpful and polite. I am able to work independently in busy environments and also within a team setting. I am outgoing and tactful, and able to listen effectively when solving prob`lems.

Academic

Ph.D. (2023)

- Indian Institute of Technology (ISM), Dhanbad
- ♦ March 2023
- Image Processing and Numerical Simulation

M.Tech (2016)

- Indian Institute of Technology (ISM), Dhanbad
- ♦ 8.51 DGPA

B.Tech in Information Technology (2013)

- ♦ Haldia Institute of Technology (WBUT)

Higher Secondary (2008)

Bidhan Chandra Institution (WBCHSE)
 62%

Secondary (2005)

- ♦ Raniganj High School (WBBSE)
- ♦ 66.5%

Personal Details

Languages: Bengali, English, Hindi, Spanish

Date of Birth: 8th May 1989

Nationality: Indian

Hobbies: Photography, Trekking, Football

GitHub: https://github.com/shirshendulayek

Google Scholar: https://rb.gy/fgbeq

Academic Experience

Ph.D. at IIT(ISM), Dhanbad

Computer Vision	3D Modelling
GIS	Numerical Analysis
Geotechnical Analysis	Surveying

Project Internship at IIRS-ISRO, Dehradun

Hadoop API	Satellie Image Archiving
Parallel Processing	Maintaining Haddop-based Cluster

IIRS-ISRO, Outreach e-Learning Education Programme

GIS Technology	G
Geospatial Data	Μ
Band-Insections	Cl

Geo-referencing Map-Generation Classifications

Teaching Experience at IIT(ISM), Dhanbad for Graduates, Masters

Surveying	Python
Machine Learning	Java

IIT(ISM), Dhanbad Survey Camp

Theodolite, Levelling, DGPS, Total Station, GIS

Basics of Astronoomical Surveying

Underground Mine Surveyinng (Correlation Surveying, Traverseing, Levelling)

SKILLS

Artificial Intelligence Computer-Vision Machine-Learning Numerical-Modeling

Deep-Learning

GIS

Programming

Java

Python

C-Language

Publications

Publication in SCI/SCIE Indexed journal

Layek, S. et al., "Rainfall & Seismological Dump Slope Stability Analysis on Active Mine Waste Dump Slope with UAV." Advances in Civil Engineering (2022):

DOI: https://doi.org/10.1155/2022/5858400 (SCIE, Q2, IF: 1.924)

Paper Published Scopus Indexed journal

Layek, S., Singh, R.K., Villuri, V.G.K., Koner, R., Soni, A., Khare, R. (2020). 3D Reconstruction: An Emerging Prospect for Surveying. In: Ghosh, J., da Silva, I. (eds) Applications of Geomatics in Civil Engineering. Lecture Notes in Civil Engineering, vol 33. Springer, Singapore.

DOI: https://doi.org/10.1007/978-981-13-7067-0_5

International Conference Scopus Indexed

Dawar, I., Gupta, S. D., Singh, R., Kothari, Y., & Layek, S. (2023, May). Forest Fire Detection using Deep Learning Techniques. In 2023 2nd International Conference on Vision Towards Emerging Trends in Communication and Networking Technologies (ViTECoN) (pp. 1-6). IEEE. DOI: 10.1109/ViTECoN58111.2023.10157262.

M. Rana, S. Bhardwaj, I. Dawar, V. Gupta, S. Layek and M. Bhushan, "Risk Analysis for Cryptocurrency: Challenges and Future Scope," 2023 3rd International Conference on Emerging Smart Technologies and Applications (eSmarTA), Taiz, Yemen, 2023, pp. 1-7, doi: 10.1109/eSmarTA59349.2023.10293308.

B. Mondal, M. Bhushan, I. Dawar, M. Rana, A. Negi and S. Layek, "Crop Disease Prediction using Machine Learning and Deep Learning: An Exploratory Study," in *ICSCSS*, 2023, DOI: 10.1109/ICSCSS57650.2023.10169612.

Dawar. I. & Layek. S. et. al., "Text Categorization using Supervised Machine Learning Approach, IEEE 6th International Conference of Women in Data Science, at Prince Sultan University, IEEE", DOI 10.1109/WiDS-PSU57071.2023.00046, 14-

Book Chapter Scopus Indexed

Bhushan, M., Singal, M., Layek, S., & Negi, A. (2023). Autonomous Navigation of Rovers Using ML and DL Techniques. In S. Kautish, N. Chaubey, S. Goyal, & P. Whig (Eds.), AI-Enabled Social Robotics in Human Care Services (pp. 212-235). IGI Global. DOI: https://doi.org/10.4018/978-1-6684-8171-4.ch008

Teaching Skills & Experience

- Assistant Professor
 Data Science and Intelligence System
 IIIT Dharwad
 April 2024 Present
- Assistant Professor
 School of Computer Science
 UPES Dehradun
 Dec 2023 April 2024
- Assistant Professor
 School of Computing
 DIT University
 August 2022 Dec 2023

Patents

- ☆ "A System for cloudburst event forecasting using Convolutional Neural Network (CNN) and Gramian Angular Field (GAF)", Application no: 202311037799, 2023

Gate Qualification

- ♦ 2014 in Computer Science and Engineering
- ♦ 2016 in Computer Science and Engineering