

Dr. Abhaya Kumar Pradhan
N-110, Artificial Intelligence Lab, SCIS
University of Hyderabad, Hyderabad-500046, INDIA
☎ (+91) 739 657 9057
✉ abhaya08csc007@gmail.com
📄 <https://abhayakumarpradhan.github.io/>



Objective

Innovative and analytical data science professional with a focus on social media analytics. Seeking an Assistant Professor position to leverage my expertise in research and teaching to contribute to the academic community and foster the next generation of data scientists.

Research Interests

- Social Network Data Analytics
- Natural Language Processing
- Machine Learning/ Deep Learning
- Health Care Analytics, Big Data
- Text Analytics
- Data Mining

Subject Interests

- NLP, Data Mining, Machine Learning, Social Network Data Analytics
- Data structures & Algorithms, DAA, Operating Systems, DBMS

Education

- 2015 **UGC NET - JRF Qualified.**
- 2024 **Ph.D. - Computer Science**, *University of Hyderabad, Hyderabad*, CGPA – 8.
- 2013 **M.Sc. – Computer Science**, *Pondicherry University, Puducherry*, CGPA – 8.73.
First Class Honours
- 2011 **B.Sc. - Computer Science**, *Utkal University, Bhubaneswar*, Percentage – 80.50.
First Class With Distinction
- 2008 **12th Science (CHSE, Odisha)**, *Stewart Science College, Cuttack*, Percentage – 62.
First Class
- 2006 **10th Class (BSE, Odisha)**, *Project High School, Rengali Dam Site, Angul*, Percentage – 85.33.
First Class

Ph.D. Thesis

Dissertation *Frameworks for Detecting Event and It's Aspects in Tweets*
Supervisors Prof. Hrushikesh Mohanty & Dr. Rajendra Prasad Lal
AI Lab, SCIS, University of Hyderabad, Telangana
Coursework Design & Analysis of Algorithms, Operating Systems, Social Network Analysis, Machine Learning

Masters Thesis

Title *Movie Recommendation System*
Supervisor Dr. K. S. Kuppusamy
School of Engineering and Technology, Pondicherry University, Puducherry
Description This thesis develops a movie recommendation system using matrix factorization to uncover latent user preferences and item characteristics from user-item interaction data. By optimizing predictive accuracy, the system enhances personalized recommendations, contributing to improved user engagement and satisfaction.

Experience

Academic

2024–Present **Assistant Professor**, *Computer Science*, School of Technology, Woxsen University, Hyderabad.
Administrative Responsibilities:

- Area Director of AIML
- IQAC Co-coordinator of CSE
- Jury of Conceptual, Applicative, & Capstone Projects(B.Tech. CSE, AIML/Data Science)

2021–2023 **Assistant Professor**, *Computer Science*, School of Science & Technology, Vishwakarma University, Pune.
Administrative Responsibilities:

- IQAC Co-coordinator of CSE
- Placement Co-coordinator of CSE
- NSS Program Officer
- Mentor for M.Sc. Data Science Program

2015–2016 **System Administrator**, *Artificial Intelligence Lab, SCIS, University of Hyderabad*, Hyderabad.
: Maintenance of AI Lab Server & HPC Clusters

Industry

2013–2014 **Web Designer & Developer**, *Zeal infovision, New Delhi*.

Publications

Scholarly Links Google Scholar Id | Scopus Id |  Profile |  ORCID

Journals

- J-25 Karthik, A., Patthi, S., Maheswari, B.U., Devi, J.S., Pradhan, A.K., Balaji, L., Nallasivan, G. and Rajaram, A., 2025. Advancing idiopathic pulmonary fibrosis prognosis through integrated CNN-LSTM predictive modeling and uncertainty quantification. *Biomedical Signal Processing and Control*, 100, p.106811. Elsevier, **IF:4.9**
- J-24 Karthik, A., Hamatta, H.S., Patthi, S., Krubakaran, C., Pradhan, A.K., Rachapudi, V., Shuaib, M. and Rajaram, A., 2024. Ensemble-based multimodal medical imaging fusion for tumor segmentation. *Biomedical Signal Processing and Control*, 96, p.106550. Elsevier, **IF:5.1**
- J-24 Pradhan A.K., Mohanty H., Lal R.P. (2024) "EDTBERT : Event Detection and Tracking in Twitter using Graph Clustering and Pre-trained Language Model". In: ICIDCA. pages 123-133, Procedia Computer Science, 2024. Elsevier.
- J-22 Pradhan A.K., Mohanty H., Lal R.P. (2022) Events in Tweets: Graph Based Techniques. In: Recent Advances in Computer Science and Communications (2022) 13: 1. <https://doi.org/10.2174/2666255813999200904133759>, Bentham Science)

Conferences

- C-23 Pradhan A.K., Mohanty H., Lal R.P. (2023) "EventBoost : Enhancement of Twitter Event Detection using Social Features and Word Embeddings". In: ICDSMLA. pages 57-68, Cham, 2023. Springer International Publishing. (Best Paper Award)
- C-19 Pradhan A.K., Mohanty H., Lal R.P. (2019) Event Detection and Aspects in Twitter: A BoW Approach. In: Fahrnberger G., Gopinathan S., Parida L. (eds) Distributed Computing and Internet Technology. ICDCIT 2019. Lecture Notes in Computer Science, vol 11319. Springer
- C-15 Pradhan A.K., Mohanty H.; Finding Tweet Events' IJCA Proceedings on International Conference on Distributed Computing and Internet Technology (ICDCIT), 2015, pp 5-12 (Best Paper Award in the 5th Student Research Symposium)

Patents

- P-24 Pradhan A.K. et al.; Machine Learning Based Algorithm to Spot Cyberbullying on Twitter, IN Patent App. 202,441,068,792 (*Published*)
- P-24 Pradhan A.K. et al.; IoT-Based Coal Mine Safety Monitoring and Alerting System, IN Patent App. 202,441,050,594 (*Published*)

Under Review

Pradhan A.K., Mohanty H., Lal R.P. TEG: Tweet Event Graph for Event detection, Tracking and Evolution. *Information Sciences*, Elsevier, SCI Journal

Pradhan A.K., Mohanty H., Lal R.P. Social Structure Graph for Emerging Event Detection and Summarization in Twitter Stream. *Social Network Analysis and Mining*, Springer, SCI Journal

Pradhan A.K. et al. Nature-inspired neural network-based intelligent modeling approaches for micro additive manufacturing system. *Optimization and Engineering*, Springer, SCI Journal

Pradhan A.K. et al. A Comparative Analysis of Signal Decomposition based Feature Extraction Strategies for EEG-based Schizophrenia Classification using Machine Learning. Intelligent Systems with Applications, Elsevier, SCI Journal

Projects

- 2021-2023 Development of AI/ML Based IoT System for monitoring the Health & Well-being in Elderly People (Industry Project), 25 Lakhs : Yodda Care
- 2022-2023 Cloud Based Condition Monitoring of Induction Motors for Fault Detection & Prediction (Industry Project), 1.5 Cr.: Wilo Mather and Platt Pumps Pvt. Ltd.

Professional Activities

- 2025 Reviewer, IET Signal Processing, Wiley
- 2025 Reviewer, IEEE International Conference on Electrical, Computer and Energy Technologies (ICECET 2025, Paris)
- 2025 Reviewer, IEEE International Conference on Sustainability, Innovation & Technology (ICSIT 2025, India)
- 2024 Reviewer, IET Signal Processing, Wiley
- 2024 Reviewer, International Journal of Sensors, Wireless Communications and Control, Bentham Science
- 2024 Reviewer, IEEE International Conference on Integrated Circuits and Communication Systems (ICICACS - 2024), India
- 2023 Reviewer, IEEE International Conference on Data Science and Network Security (ICDSNS-2023), India
- 2023 Reviewer, IEEE International Conference on Integrated Intelligence and Communication Systems (ICIICS-2023), India
- 2023 Reviewer, IEEE International Conference on Mobile Networks and Wireless Communications (ICMNBC-2023), India
- 2022 Reviewer, IEEE Transactions on Emerging Topics in Computing, IF: 6.595, Web of Science-SCIE Journal.
- 2021 Reviewer, International Conference on Modern Management based on Big Data (MMBD 2021), Quanzhou, China

Workshop & Conference Attended

- 2025 FDP on Convergence of ML, Data Science, IoT and Networks: Trends and Applications, NIT Warangal & NIT Rourkela, India [21-30, April 2025]
- 2024 International Conference on Computing, Communication & Learning (COCOLE-2024), NIT, Warangal, India [13-15, Sept. 2024]
- 2024 FDP on Recent Trends & Future Applications in Natural Language Processing, NIT Warangal, India [29 May-8 June, 2024]
- 2024 FDP on Innovative & Creative Classroom Pedagogy for Enhanced Learning & Engagement, Woxsen University, Hyderabad, India [20-24 May 2024]

- 2024 International Conference on Innovative Data Communication Technologies and Application (ICIDCA 2024), Coimbatore, India [10-11, Jan. 2024]
- 2024 Hands-on workshop on “Standards Compliant Dynamic Deployment of Fog Computing Applications”, SCIS, UoH, Hyderabad [6 Jan. 2024]
- 2023 International Conference on Data Science, Machine Learning & Applications (ICDSMLA-23), GNITS, Hyderabad [15-16 Dec. 2023]
- 2023 “Hands-on Workshop on MATLAB” Centre for Modelling Simulation and Design (CMSD), UoH, Hyderabad [6-7 Nov. 2023], IoE, UOH.
- 2023 International Symposium on “A Dive into Generative Deep Learning”, IEEE Hyderabad Section.[5 July 2023]
- 2022 FDP on “APPLICATIONS OF DATA SCIENCE USING ML TECHNIQUES” [23 May 2022 to 1 June 2022]
- 2021 Next Generation Networks (NGN) & AI for Data Analytics and Predictive Technology Applications, IIT BHU & CISCO [22-23 March 2021]
- 2020 e-Faculty Training program on Machine Learning Technologies for Social Media Analytics (An information security perspective), IIT Guwahati. [19-23 Aug 2020]

Awards

- 2023 Best Paper Award, ICDSMLA-2023
- 2015 Awarded with National Junior Research Fellowship by UGC, New Delhi.
- 2015 Qualified for UGC-NET Assistant Professorship.
- 2015 Won second prize in the 5th Student Research Symposium, ICDCIT-2015
- 2014 Qualified for GATE
- 2013 Designed and developed a web application (with CMS) for the Department of Civil Engineering, Pondicherry University (Currently maintained by Computer Centre, Pondicherry University)
- 2011-2023 Selected for Merit cum Means Scholarship, Pondicherry University
- 2006 Qualified Odisha State Talent Scholarship Examination by World Health & Education Service, Bhubaneswar, Odisha (STD-X)

Tools & Technologies

- Programming PYTHON, C, C++, R, PHP, MySQL, NoSQL, JS, HTML, CSS
- Lib. NLTK, Tweepy, NetworkX, TextBlob, SciPy, NumPy, Pandas, Gensim, Matplotlib/Seaborn, Dash, Hugging Face, PyTorch
- Application \LaTeX , Shell Script, Git, PyCharm, FileZilla, TeamViewer, WinSCP, Eclipse, Visula
- SW Studio, MongoDB,XAMPP, OpenOffice, Microsoft Windows, Mendeley, Adobe Photoshop
- Platforms Linux, Windows, MAC

Online Certifications

- 2020 Practical Machine Learning with Tensorflow by Google and IIT Madras.

2020 Database Management System by Department of Computer Science & Engineering,
IIT Kharagpur.

Languages

Odia **Mother-tongue**
English **Fluent**
Hindi **Fluent**
French **Basic**

Basic words & Phrases

Interests

- Poetry
- Yoga, Meditation
- 8 ball Pool, Carrom, Chess
- Odia Literature
- Marathon Run
- Cooking

Personal Details

Mother's Name: Smt. Anjali Pradhan
Father's Name: Shri. Bharata Charana Pradhan
D.O.B.: 20 June 1991
Place of Birth: Khamar, Angul, Odisha-759118
Marital Status: Married (on 4 Feb. 2025)

References

Ref-I

Prof. Hrushikesh Mohanty
Emeritus Professor,
CVR College of Engineering, Hyderabad

Visiting Professor,
IIT Hyderabad, Hyderabad

Professor (Retired) & Honorary Professor
School of Computer & Information Sciences(SCIS) University of Hyderabad, India.
E-mail: hmcs@uohyd.ac.in
Mob: 9937220195
Web: HomePage

Ref-II

Prof. Atul Negi
Professor & Dean
School of Computer & Information Sciences (SCIS) University of Hyderabad, India.
E-mail: atul.negi@uohyd.ac.in
Mob: 8008783737
Web: HomePage

Ref-III

Dr. Rajendra Prasad Lal

Assistant Professor

School of Computer & Information Sciences (SCIS) University of Hyderabad, India.

E-mail: rplcs@uohyd.ernet.in

Mob: 7893937026

Web:HomePage

I hereby declare that the information provided above is true and accurate to the best of my knowledge.



Dt: 09-08-2025