Saumya Yadav

+91-7905814587 saumyay.15@gmail.com /saumya-yadav-152021
Delhi, India saumya@iiitd.ac.in Google Scholar

Highlights

- HCI and AI researcher focused on creating inclusive, cognitively adaptive educational tools for learners with attention challenges.
- Selected for competitive research internship at the National Institute of Informatics (NII), Japan.
- First-author publications in premier venues such as CHI'25 (Doctoral Consortium Paper), MMM'25 (Main track), AIED'24 (Main track) and AIED'23 (Doctoral Consortium Paper).

Education

IIIT-Delhi, Delhi Started in Jan, 2022
PhD

Madan Mohan Malaviya University of Technology, Gorakhpur 2016
M-Tech

Moradabad Institute of Technology, Moradabad 2013
B-Tech

Internship

Research Intern October, 2023 - February, 2024
National Institute of Informatics, Japan

Grant and Awards

- Recipient of the Gary Marsden (2025) and CHI Travel award (2025), AI in Education (AIED) Conference Scholarship (2024 and 2023).
- Selected for research internship at National Institute of Informatics (NII), Japan (2023).
- Qualified NTA UGC NET (2019).

Selected Publications

- **PhD-Related Research**
  - **S. Yadav**, "Decoding Attention in Children with Attention Deficit Hyperactivity Disorder through Multimodal Analysis for Digital Learning," in *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems*, pp. 1–6, ACM, 2025. (Doctoral Consortium Paper) [CORE A*]
  - **S. Yadav**, É. Lincker, C. Huron, S. Martin, C. Guinaudeau, S. Satoh, and J. Shukla, "Towards Inclusive Education: Multimodal Classification of Textbook Images for Accessibility," in *International Conference on Multimedia Modeling (MMM)*, pp. 212–225, Springer, 2025. [CORE B]
  - **S. Yadav**, M. N. Siddiqui, Y. Vats, and J. Shukla, "Engageme: Exploring Neuropsychological Tests for Assessing Attention in Online Learning," in *International Conference on Artificial Intelligence in Education (AIED)*, pp. 394–408, Springer, 2024. [Core A]
  - **S. Yadav**, É. Lincker, C. Huron, S. Martin, C. Guinaudeau, S. Satoh, and J. Shukla, "Towards Inclusive Pedagogy: A Multimodal Classification of Textbook Illustrations for Adapted Learning Environments," in *JEP-TALN-RECITAL*, 2024. (Poster)
  - D. Verma, S. Bhalla, S. V. S. Santosh, **S. Yadav**, A. Parnami, and J. Shukla, "Attentionet: Monitoring Student Attention Type in Learning with EEG-Based Measurement System," in *11th International Conference on Affective Computing and Intelligent Interaction (ACII)*, pp. 1–8, IEEE, 2023.
  - **S. Yadav**, M. N. Siddiqui, and J. Shukla, "EngageMe: Assessing Student Engagement in Online Learning Using Neuropsychological Tests," in *23rd International Conference on Artificial Intelligence in Education (AIED)*, pp. 148–154, Springer, 2023. (Doctoral Consortium Paper) [CORE A]

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- **Journal Publications (Pre-PhD)**
  - R. Chandra Joshi, **S. Yadav**, M. Kishore Dutta, and C. Travieso-Gonzalez. "An efficient convolutional neural network to detect and count blood cells." *Uniciencia* 36, no. 1: 449-457. 2022.
  - **S. Yadav**, N. Sengar, A. Singh, A. Singh, and M. K. Dutta. Identification of disease using deep learning and evaluation of bacteriosis in peach leaf. *Ecological Informatics*, 61: 101247. 2021. [Q1, IF = 5.9]
  - Joshi, R.C., **Yadav S.**, Pathak, V.K., Malhotra, H.S., Khokhar, H.V.S., Parihar, A., Kohli, N., Himanshu, D., Garg, R.K., Bhatt, M.L.B. and Kumar, R. A deep learning-based COVID-19 automatic diagnostic framework using chest X-ray images. *Biocybernetics and Biomedical Engineering*, 41(1), pp.239-254. 2021 [Q1, IF = 5.3]
- **Book Chapters**
  - **Yadav S.**, Chandra Joshi D., Joshi A., Mathur S., and Bhatt M.. "Intelligent approaches for disease detection and prevention." In *Internet of Things in Modern Computing*, pp. 113-132. CRC Press, 2023.
  - **Yadav S.**, Joshi, R. C., Yadav, D. Trustworthy machine learning for cloud-based internet of things (IoT). In *Transforming Management with AI, Big-Data, and IoT* (pp. 155-167). Cham: Springer International Publishing. 2022

Work Experience

IIIT-Delhi January 2021-December, 2021
Teaching Fellow

Centre for Advanced Studies, AKTU, Lucknow July 2019–December 2020
Junior Research Fellow (JRF) under DST funded Project

IEC College of Engineering and Technology, Greater NOIDA January 2018–June 2019
Assistant Professor

Projects

- Multimodal Analysis of Attention among Children with Attention Deficit Hyperactivity Disorder (ADHD) for Digital Learning. (PhD)
- Multimodal classification of textbook illustrations. (Internship)
- Assistive device to impart perceptual ability to the visually-impaired using intelligent scene captioning. (Department of Science and Technology Project)

Technical Skills

- **Programming Languages:** Python, C
- **ML& DL:** Scikit-learn, TensorFlow, Keras, PyTorch
- **Data Analysis & Signal Processing:** Pandas, NumPy, HRV/EEG preprocessing, OpenCV
- **NLP & Vision Models:** HuggingFace Transformers (e.g., BERT, CamemBERT), YOLO, CNNs
- **Generative AI:** Diffusion models (conceptual), prompt engineering
- **Explainability:** SHAP, LIME
- **Tools & Platforms:** Git, Jupyter, Google Colab, LaTeX

Self Appraisal

- Always ready to learn something new.
- Hardworking, optimistic, and confident.
- Ability to conceptualize and generate creative ideas.

I hereby declare that the above information is true to my knowledge.

SAUMYA YADAV