Srishti Yadav

Ph.D. Research Scholar,
Machine Vision Lab,
Mehta Family School of Data Science and Artificial Intelligence,
IIT Roorkee, Uttrakhand, India, 247667.

✉: srishti_y@mfs.iitr.ac.in
🌐: srishtiy.wixsite.com/srishti-yadav
in: linkedin.com/in/srishti-yadav
🎓: Google Scholar

OBJECTIVE

I am a Ph.D. student at Machine Vision Lab, IIT Roorkee, India, supervised by Prof. Balasubramanian Raman and Prof. Sanjeev Kumar. My primary research interest revolves around Privacy Preserving Deep Learning algorithms. I am looking for a reserach position in the field of data privacy and security that aligns with my mathematics background.

EDUCATION

Ph.D., Data Science and Artificial Intelligence (pursuing), CGPA: 9.0/10   July 2022 onwards
Indian Institute of Technology, Roorkee, Uttrakhand, India.
Thesis Area: *Privacy Preserving Deep Learning*
Supervisor: Prof. Balasubramanian Raman and Prof. Sanjeev Kumar

M.Sc., Mathematics, CGPA: 7.93/10   2021
Banaras Hindu University, Varanasi, Uttar Pradesh, India.

B.Sc.(Hons.), Mathematics, CGPA: 8.58/10   2019
Dayalbagh Educational Institute, Agra, Uttar Pradesh, India.

ACADEMIC EXPERIENCE

- Teaching Assistant for B.Tech. 3rd year course **Image and Video Analytics (DA-302)** Spring semester 2024-25.

- Teaching Assistant for the M.Tech. 1st-year course **Advanced Data Structures and Algorithm (DAC-505)** during Autumn semester 2024-25.

- Teaching Assistant for the M.Tech. 1st-year course **Computer Vision (AID-565)** during Spring semester 2023-24.

- Teaching Assistant for the B.Tech. 2nd-year course **Design and Analysis of Algorithms (DA-203)** during Autumn semester 2023-24.

- Teaching Assistant for the B.Tech. 1st-year course **Discrete Structures (DA-104)** during Spring semester 2022-23.

RESEARCH INTERESTS

- Differential Privacy
- Machine Learning and Deep Learning
- Incremental Learning
- Spiking Neural Networks
- Federated Learning

PUBLICATIONS

1. **Srishti Yadav***, Anshul Pundhir*, Balasubramanian Raman, Sanjeev Kumar, "Unveiling Robustness of Spiking Neural Networks Against Data Poisoning Attacks", **Published** in International Joint Conference on Neural Networks (IJCNN), 30 June - 5 July 2024, Yokohama, Japan. (*denotes equal contribution).

2. **Srishti Yadav**, Anshul Pundhir, Tanish Goyal, Balasubramanian Raman, Sanjeev Kumar, "Differentially Private Spiking Variational Autoencoder", **Published** in International Conference on Pattern Recognition (ICPR), 1 - 5 December, Kolkata, India.

AWARDS & SCHOLARSHIPS

1. Selected for the prestigious **TCS Research Fellowship** (Cycle-18, 2024).

2. Receiving **MHRD Scholarship** from July 2022 till present.

3. Secured **All India Rank 576** in **GATE, Mathematics (2022)**.

4. Secured **All India Rank 97 (LS)** in **CSIR -UGC NET (2021)**.

5. Qualified **GATE, Mathematics (2021)**.

TECHNICAL SKILLS

Programming Languages   : Python, MATLAB (acquainted).

Development Tools   : PyTorch, Anaconda, Visual Studio Code.

WORKSHOP/TRAINING/CONFERENCES ATTENDED

1. Attended 14th Indian Conference on Computer Vision, Graphics and Image Processing, 15-17 December, IIT Ropar, India   2023.

2. Participated in **Mathematics Training and Talent Search Programme** held at **Indian Institute of Technology, Guwahati** from May 28-June 2023   2018.

RESEARCH COURSEWORK DETAILS

- Data Structures and Algorithms (AID 525) - Grade Obtained: A
- Big Data Analytics (AID 571) - Grade Obtained: A
- Mathematics for Data Sciences (AID 521) - Grade Obtained: A

RELEVANT COURSES

1. **Unsupervised Learning, Recommenders, Reinforcement Learning** authorized by DeepLearning.AI and Stanford University, offered through Coursera.

2. **Advanced Learning Algorithms** authorized by DeepLearning.AI and Stanford University, offered through Coursera.

3. **Supervised Machine Learning: Regression and Classification** authorized by DeepLearning.AI and Stanford University, offered through Coursera.

VOLUNTEER EXPERIENCE

1. Peer-reviewed articles in CVIP 2024–2025 and CoDS 2024 conferences.

2. Worked as a Volunteer in **International Conference on Computations and Data Science (CoDS-2024)**, Organized by Department of Mathematics jointly with iHUB DivyaSampark, IIT Roorkee, March 08-10, 2024.

3. Worked as **National Service Scheme (NSS) Volunteer** for 2 years (2016 - 2018).

DECLARATION

I hereby state that all the information mentioned above is true to the best of my knowledge and I shall be held responsible for any discrepancy found later.

Date: July 1, 2025
Place: Roorkee, Uttrakhand.   **Srishti Yadav**

REFERENCES

Prof. R. Balasubramanian

Professor, CSE Department, Indian Institute of Technology, Roorkee, India.
E-mail: bala@cs.iitr.ac.in

Prof. Sanjeev Kumar

Professor, Department of Mathematics, Indian Institute of Technology, Roorkee, India.
E-mail: sanjeev.kumar@ma.iitr.ac.in