RISHABH JAIN

📞 +91-9315776478 ✉ rishabh.rj014@gmail.com 🔗 [My Portfolio](#) [in] [LinkedIn](#) [◯] [GitHub](#)

EDUCATION

Indian Institute of Technology, Ropar   **July 2019 - May 2023**
B.Tech Honors in Computer Science and Engineering   *CGPA: 8.7*
with Concentration in Artificial Intelligence, Merit Scholar   *Honors focus: Federated Learning, Computer Vision*

WORK EXPERIENCE

Arista Networks, Bengaluru, India   **July 2023- present**
Software Engineer, Pluribus Team
- Contributing to performance-centred overhaul of the **Arista Firewall** in the Arista **Extensible Operating System**

General Electric Healthcare, Bengaluru, India   **May 2022- July 2022**
EID Intern (Software Engineering)   *[Certificate ↗](#)*
- Improvised the **YOLOv6 algorithm** to implement an end-to-end pipeline for autonomous patient monitoring

RESEARCH WORK AND PUBLICATIONS

Video Transformer Based Bodily Behaviour Recognition (MultiMediate 2023)   **May 2023-July 2023**
Supervised by Dr. Abhinav Dhall   *IIT Ropar*
- Secured **second place** in the Bodily Behaviour Recognition track of ACM Multimedia 2023 Grand Challenges
- Co-authored **"MAGIC-TBR: Multi-view Attention Fusion for Transformer based Bodily Behavior Recognition in Group Settings"**, accepted at the **ACM MM 2023 Conference** | [dl.acm.org ↗](#)
- Co-authored **"Multi-View Attention Fusion for Explainable Body Language Behavior Recognition"**, currently in review at **IEEE Transactions on Affective Computing**

Spatio-Temporal Hotspot Detection in Microsoft Azure | BTech Thesis   **August 2022-July 2023**
Supervised by Dr. Viswanath Gunturi and Microsoft India | [thesis document ↗](#)   *IIT Ropar*
- Formulated a framework to track **spatio-temporal patterns** of usage spikes(hotspots) in **Microsoft Azure** Cloud Services in India
- Co-authored **"Periodic Spatio-Temporal Colored Hotspot Detection in Azure Traffic Data"** currently in review at the **GeoInformatic Journal**

Epilepto WearOS Application   **January 2022-May 2022**
Supervised by Dr. Ashish Sahani   *[Certificate ↗](#)*
- Contributed to novel data transmission algorithm in an **Android cum WearOS smartwatch application** to monitor patients suffering from epilepsy
- **Co-authored a conference paper** titled **"A General System for Dataset Generation from Smartwatch Sensors for Biomedical Research"** accepted in COMSYS-2022 | [springer ↗](#)

TECHNICAL SKILLS

Languages: C, C++, Python, Java, PostgreSQL, PostGIS, SQLite
Tools and Libraries: Git, Perforce, Bash, Docker, Flask, OpenCV, PyTorch, OpenAI Gym, Numpy, Pandas

KEY PROJECTS

Client Selection in Deep Federated Recommender Systems | BTech Honors Project **August 2022-July 2023**
Supervised by Dr. Shweta Jain | [thesis document ↗](#)   *IIT Ropar*
- Developed client subset selection strategies to optimise costs while training **deep federated recommender systems**

Efficient Image Super-Resolution (NTIRE CVPR Challenge 2023)   **February 2023-May 2023**
Supervised by Dr. Abhinav Dhall   *IIT Ropar*
- Achieved a higher PSNR by improving the deep learning based image super-resolution RFDN baseline on DIV2K dataset

Full Stack Employee Application Management Web Portal, IIT Ropar   **January 2022-May 2022**
Supervised by Dr. Puneet Goyal   *IIT Ropar*
- Implemented a **full stack web application** with user authentication and multi-stage application propagation **as a part of IIT Ropar's website** in React.js, PostgreSQL and Flask

POSITIONS OF RESPONSIBILITY

Club Head, Robotics Club, IIT Ropar   **October 2020-September 2022**
[Certificate ↗](#)
- Conducted club mentorship sessions for freshmen and led club projects in the techno-cultural fest Advitiya
- Participated in **ABU-ROBOCON Robotics Competition 2020**, qualifying for the national round of **DD-ROBOCON 2020** held at IIT Delhi