Shatrudhan Chaudhary (Satish)

jassatish4010@gmail.com | Linkedin | GitHub

PROFILE

Final-year B.Tech student in Computer Science Engineering with applied research experience in AI-based medical image analysis. Skilled in CNN/U-Net architectures and ensemble deep learning, with published work in disease classification from endoscopy and pneumonia detection from CXR. Now seeking to contribute to innovation in cancer imaging and real-time radiotherapy systems, focusing on segmentation, motion tracking, and explainable AI in clinical contexts.

EDUCATION

- Jain University School of Engineering and Technology | B.Tech. in Computer Science Engineering
 - Bangalore, Karnataka | 2021 2025 |
 - CGPA: 8.5/10
- DAV Sushil Kedia Viswa Bharti School Class XII (Kathmandu, Nepal)
 - percentage: 89.75%
- G.S Niketan Higher Secondary School Class X (Hetauda, Nepal)
 - percentage: 87.5 %

SCHOLARSHIPS

• Study in India (SII) Scholarship: Awarded by the Government of India (Ministry of Education, 2021-2025) for meritorious international students.

RESEARCH EXPERIENCE

- <u>Deep Neural Networks for Disease Classification from Endoscopic Imaging</u> (Published)

 Presented at IEEE ICERCS'24, Karpagam Academy of Higher Education, India (Dec 2024). Developed a CNN and U-Net based model achieving 98.8% classification accuracy for gastrointestinal diseases using endoscopic images.
- <u>Co-author Ensemble Deep Learning for Pneumonia Detection</u> (Published)
 IEEE ICDSBS 2025. Developed an ensemble model using DenseNet, MobileNet, and EfficientNet to classify pneumonia from chest X-rays. Achieved 99.24% accuracy using transfer learning and model fusion strategies.

RESEARCH INTERESTS

- Deep Learning for Cancer Imaging (CT, MRI, CBCT)
- AI-Enhanced Radiotherapy Planning and Monitoring
- Medical Image Segmentation and Motion Tracking
- Multimodal Learning and Domain Adaptation
- Explainable AI in Oncology
- 4D Imaging & Real-Time Inference (e.g., Jetson, TFLite)

TECHNICAL SKILLS

- Core: Python, TensorFlow, Keras, PyTorch, OpenCV
- Medical AI: CNNs, U-Net, Transfer Learning, Grad-CAM
- Edge Deployment: TensorFlow Lite, ONNX, Jetson Nano
- Research Tools: Jupyter Notebook, Google Colab, LaTeX, Git
- Emerging: Basic understanding of 4D imaging, IGRT systems, Cone Beam CT, multileaf collimator tracking

PROJECTS

• Body Pose Recognition | Mar 2024 | GitHub

Pose detection pipeline using TensorFlow & OpenCV. Concepts transferable to field activity tracking for agricultural labor safety.

• Global Terrorism Dataset Analysis | GitHub

Investigated global terrorism patterns through comprehensive exploratory data analysis (EDA), uncovering key trends and insights for strategic decision-making.

PUBLICATIONS

• Chaudhary, S. et al. (2024). *Deep Neural Networks for Disease Classification from Endoscopic Imaging*. IEEE ICERCS'24.

DOI: 10.1109/ICERCS63125.2024.10895860

• Chaudhary, S. et al. (2025). Ensemble Deep Learning Approach for Pneumonia Detection Using DenseNet, MobileNet, and EfficientNet with Transfer Learning. IEEE ICDSBS 2025.

DOI: 10.1109/ICDSBS63635.2025.11031996

ENGLISH LANGUAGE PROFICIENCY

PTE Academic Score: Overall 69 (Listening: 68, Reading: 69, Speaking: 64, Writing: 70)

REFERENCES

Dr. Mahesh T.R. **Head of Department**, Associate Professor, **Jain University**

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