Anshul Pundhir

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O: www.anshulpundhir.github.io

OBJECTIVE

I am a Ph.D. student at Machine Intelligence Lab, IIT Roorkee, India, supervised by Prof. Balasubramanian Raman. I am interested in tech ideas, learning soft skills, and discussing solutions. My primary research interest revolves around Medical Image Analysis using Deep learning-based techniques. I am seeking a collaboration with a medical research lab engaged in developing innovative solutions for real-life medical challenges that would offer professional growth and excel my skills and experience.

EDUCATION

Ph.D., Computer Science (pursuing), CGPA: 9.25/10

Dec 2019 onwards

Indian Institute of Technology, Roorkee, Uttrakhand, India.

Thesis Area: Medical Image Analysis
Supervisor: Prof. Balasubramanian Raman

Integrated M.Tech., Computer Science, CGPA: 8.51/10

2019

Dayalbagh Educational Institute, Agra, Uttar Pradesh, India.

Integrated M.Sc., Computer Science, CGPA: 8.30/10

2018

Dayalbagh Educational Institute, Agra, Uttar Pradesh, India.

B.Sc., Computer Science, CGPA: 8.45/10

2017

Dayalbagh Educational Institute, Agra, Uttar Pradesh, India.

ACADEMIC EXPERIENCE

Teaching Assistant

Dec 2019 - Present

Indian Institute of Technology, Roorkee, India.

Assisted Prof. Balasubramanian Raman in tutorial and quiz sessions for Advance Algorithms (CSN-501), Data Structures and Algorithms (AID-525), Fundamentals of Object Oriented Programming (CSN-103), and Discrete Structures (CSN-106) courses.

Teaching Assistant

Jul 2016 - Jul 2018

Dayalbagh Educational Institute, Agra, Uttar Pradesh, India.

Assisted Dr. R.S. Pavithr in lab and quiz sessions for Soft-Computing and Programming courses.

RESEARCH INTERESTS

- Medical Image Analysis
- Deep Learning
- Machine Learning
- Soft Computing
- Evolutionary Algorithms

PUBLICATIONS

Conferences

- [C-1] Anshul Pundhir, Saurabh Dadhich, Ananya Agarwal, and Balasubramanian Raman, "Towards Improved Skin Lesion Classification using Metadata Supervision", Accepted for publication in 26th International Conference on Pattern Recognition (ICPR 2022), August 21-25, 2022, Montréal Québec, Canada.
- [C-2] Anshul Pundhir, Deepak Verma, Puneet Kumar, and Balasubramanian Raman. "Region extraction based approach for cigarette usage classification using deep learning". 6th IAPR International Conference on Computer Vision and Image Processing (CVIP 2021), 3-5th Dec, 2021 IIT Ropar, Punjab-140001, India.

AWARDS & SCHOLARSHIPS

- 1. Registration support from the UGC-JRF Contigency fund to present a research paper in the 6th IAPR Inetrnational Conference on Computer Vision and Image Processing (CVIP 2021), IIT Ropar, India.
- 2. Received UGC-JRF Scholarship during Ph.D. (Dec, 2019 onwards)
- 3. Gave a topper talk on chamomile tea with toppers for JRF
- 4. Qualified NTA NET-JRFJune with 99.88%ile Computer Science in 2019
- 5. Received MHRD Scholarships during M.Tech in 2019
- 6. Qualified NTA NET June, Dec Computer Science in 2018
- 7. Qualified **GATE** Computer Science in 2018
- 8. Awarded third in National Science Exhibition
- 9. Third rank in city, National Science Olympiad

TECHNICAL SKILLS

Programming Languages : C/C++ (proficient), Python (proficient),

Core Java (acquainted)

Development Tools : MATLAB, PyTorch, Anaconda, PyCharm,

Spyder, Eclipse, Visual Studio Code.

OTHER PROJECTS

• Video Analytics

Application of computer vision algorithms for academic purpose systems.

• Intrusion Detection System

Use feature elimination technique to get relevant features for system.

• Credit Card Fraud Detection System

Detect fraudulent transactions using ML techniques.

• Twitter Sentiment Analysis
Analyze tweets to perform sentiment analysis.

• Automated Essay Grader
Use NLP to evaluate the effectiveness of the given essay.

• Time-Table Utility Software
Extract information from given time table schedule.

WORKSHOP/TRAINING/CONFERENCES ATTENDED

- Summer internship under supervision of Prof. Venktesh Babu from IISc Banglore (April-July, Virtual).
- 2. Attended 6th International Conference on Computer Vision and Image Processing (CVIP), IIT Ropar, India (Virtual) 2021.
- 3. Attended 28th International Conference on Image Processing (ICIP), Anchorage, Abu Dhabi, UAE (Virtual) 2021.
- 4. Attended The Workshop on Computer Vision and Image Processing (WCVIP), IIT Roorkee, India (Virtual) 2020.

TALKS/WORKSHOPS DELIVERED

- 1. Assisted a Faculty Development Program (FDP) on 'Machine Learning for Computer Vision (ML4CV)' at E&ICT Academy, IIT Roorkee.

 March 2022.
- 2. Conducted a training session on 'Clustering Algorithms and their use cases' at E&ICT Academy, IIT Roorkee.

 Nov 2021.
- 3. Assisted in a training session on 'Human Action Recognition and Generation' during 'The Workshop On Computer Vision And Image Processing (WCVIP) at IIT Roorkee. Dec 2020.
- 4. Organized a training session on 'Dimensionality Reduction Algorithms' during the workshop on Digital Image Processing & Applications (DIPA) at NIT Arunachal Pradesh. Aug 2020.

ACTIVITIES

Research Paper Reviewer: Reviewed research papers in various reputed conferences, including International Conference on Pattern Recognition (ICPR), International Conference on Computer Vision & Image Processing (CVIP).

Co-curricular Activities: Volunteer for data collection in a collaborative project between Michigan State University, (MSU) USA and Dayalbagh Educational Institute, India, Volunteered in National Service Scheme (NSS), Regular participant in dramatic events in college like Street-plays, skits, Mime, Nukkad Natak, etc.

Hobbies: Watching movies, Hypothetical story-telling, Music, Meditation, and Volunteering

PERSONAL DETAILS

Father's Name : Pushpendra Veer Singh Pundhir Mother's Name : Sadhana Pundhir

Date of Birth : Aug 13, 1996 Martial Status : Unmarried

Nationality : Indian

Permanent Address: 605, Verma Nagar Agra Road Etah, Uttar Pradesh, India - 207001.

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: June 17, 2022

Place: Roorkee, Uttrakhand.

Anshul Pundhir

REFERENCES

Prof. R. Balasubramanian

Professor, CSE Department, Indian Institute of Technology, Roorkee, India.

E-mail: bala@cs.iitr.ac.in

Prof. Gur Saran Adhar

Professor, Computer Science Department, University of North Carolina (UNCW),

Wilmington.

E-mail: adharg@uncwil.edu

Prof. Preetvanti Singh

Professor, Physics and Computer Science Department,

Dayalbagh Educational Institute, Agra, Uttar Pradesh, India.

E-mail: preetvantisingh@gmail.com

Prof. Lotika Singh

Associate Professor, Physics and Computer Science Department,

Dayalbagh Educational Institute, Agra, Uttar Pradesh, India.

E-mail: lotikasingh@dei.ac.in