# Aditya Panda

#### Experience

Scientist May, 2025 – Till date

CSIR Fourth Paradigm Institute, Bangalore, India

- Currently involved in a project of developing Multi-modal Large Language Model (MLLM).
- Joined as an Assistant Professor of the AcSIR.

## **EDUCATION**

#### Ph.D. in Computer Science

July 2019 - April 2025

Indian Statistical Institute, Kolkata

• Research area: Compositional Zero-Shot Learning

## M. Tech in Computer Science

June 2017 - July 2019

Indian Statistical Institute, Kolkata

#### B.E. Electronics and Tele-Communication Engineering

August 2013 - June 2017

Jadavpur University, Kolkata, India

#### **PUBLICATIONS**

- 1. Aditya Panda, and Dipti Prasad Mukherjee. "Knowledge Guided Transformer Network for Compositional Zero-shot Learning." accepted in ACM Transactions on Multimedia Computing, Communications and Applications.
- 2. Aditya Panda, and Dipti Prasad Mukherjee. "Compositional Zero-Shot Learning using Multi-Branch Graph Convolution and Cross-layer Knowledge Sharing", in *Pattern Recognition*, 2024.
- 3. Aditya Panda, Bikash Santra and Dipti Prasad Mukherjee, "Isolating Features of Object and Its State for Compositional Zero-Shot Learning", in *IEEE Transactions on Emerging Topics in Computational Intelligence*, 2023.
- 4. Aditya Panda, Bikash Santra and Dipti Prasad Mukherjee, "Bi-Modal Compositional Network for Feature Disentanglement" in *IEEE International Conference on Image Processing (ICIP)*, 2022.
- 5. Aditya Panda and Dipti Prasad Mukherjee, "Monocular 3D Human Pose Estimation by Multiple Hypothesis Prediction and Joint Angle Supervision", *IEEE International Conference on Image Processing (ICIP)*, 2021.
- Aditya Panda, Rammohan Mallipeddi, Swagatam Das, "Particle Swarm Optimization with a Modified Learning Strategy and Blending Crossover", IEEE Symposium Series on Computational Intelligence (SSCI), 2017.
- 7. Aditya Panda, Amit Konar, Srijan Ghoshal, Bonny Banerjee, Atulya Nagar, "Static Learning Particle Swarm Optimization with Enhanced Exploration and Exploitation using Adaptive Swarm Size" *IEEE World Congress on Computational Intelligence (WCCI)*, 2016.

# Manuscripts Currently Under review

- 1. Aditya Panda, and Dipti Prasad Mukherjee. "Partially Supervised Compositional Zero-Shot Learning by Locality Preserving Neighbourhood Aggregation", under major revision in an *IEEE Transaction*.
- 2. Aditya Panda, and Dipti Prasad Mukherjee. "Prompt-Driven Multi-Branch Disentanglement Network for Compositional Zero-Shot Learning", communicated to an *IEEE Transaction*.
- 3. Aditya Panda, and Dipti Prasad Mukherjee. "Unseen State-Object Composition Recognition Through Cross-Modal Interaction", communicated to a *conference*.

## Academic Services

- 1. Worked as anonymous reviewer/sub-reviewer for the following journals: *IEEE TPAMI*, *IEEE TNNLS*, *IEEE TIP*, *IEEE TETCI*, *ACM Trans. on Multimedia Computing Communications and Applications* and *IEEE ICIP*.
- 2. Delivered lectures in miscellaneous deep-learning based topics in the Winter School on Deep Learning, for the years 2022, 2023 and 2024. Also delivered lectures in deep learning and machine learning based topics in different summer and winter schools organised by Technology Innovation Hub, Indian Statistical Institute (ISI) and also in Center for AI & ML (CAIML), ISI.
- 3. Performed the duty of Teaching Assistant for the 'Computing for Data Science' subject for the students of the PGDBA course in ISI, Kolkata for the years 2022, 2023, 2024.
- 4. Supervised a group of participants in the Summer School organised by the Electronics and Communication Sciences Unit, ISI Kolkata in the year 2022, 2023 and 2024.

## Skills

Programming Languages & Frameworks: Python, C, MATLAB, PyTorch, Tensor-Flow.

## Awards and Honors

- 1. Qualified UGC-NET in Computer Science, in the year 2018.
- 2. In WBJEE 2013 common merit list rank was 94 out of nearly one lakh twenty thousand students.
- 3. JEE Main 2013 (formerly AIEEE) all India common merit list rank was 837 out of nearly 12 lakh students. Rank obtained in the state West Bengal was 34.
- 4. Recipient of Kishore Vaigyanik Protsahan Yojana (KVPY) scholarship provided by DST, under SX stream in the year 2013.
- Recipient of for "Central Scheme of Scholarship for College and University students" provided by Ministry of Human Resource Development (MHRD) for Higher Secondary marks.