

Avideep Mukherjee

CONTACT INFORMATION

RM-504, Rajeev Motwani Building,
IIT Kanpur,
Kanpur, Uttar Pradesh

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EXPERIENCE

Indian Institute of Technology Kanpur, Kanpur, India

Teaching Assistant (CS772) August, 2022 - Present
Tutor (ESC101) April, 2022 - June, 2022
Teaching Assistant (CS776A) Dec, 2021 - April, 2022
Teaching Assistant (CS771) Aug, 2021 - Dec, 2021
Admin TA (ESC101) August, 2020 - March 2021
Teaching Assistant (CS698O) Jan, 2020 - April, 2020
Tutor (ESC101) July, 2019 - Nov, 2019
Teaching Assistant (ESC101) July, 2018 - Dec, 2018

LinkedIn Corporation, Bangalore, India

Software Development Engineer Intern June, 2021 - August, 2021

Indian Statistical Institute, Kolkata, India

Summer Intern May, 2017 - July, 2017

EDUCATION

Indian Institute of Technology Kanpur, Kanpur, India

PhD in Computer Science and Engineering July, 2018 - Present
Advisor : Prof. Vinay P. Namboodiri, Prof. Piyush Rai
CPI: 7.30

Ramakrishna Mission Vivekananda Educational and Research Institute, Belur, West Bengal, India

MSc in Computer Science August, 2016 - June, 2018

- Dissertation Topic: A Medoid Based Weighting Scheme for Qualitative Improvement of Nearest Neighbor Decision Rule
- Advisor: Dr. Tanmay Basu
- Division: First (93.2 %, CGPA 9.32)

Ramakrishna Mission Vidyamandira, University of Calcutta, Kolkata, West Bengal, India

Bachelor of Science July 2013 - May, 2016

- Honours: Computer Science
- Minors: Mathematics and Electronics
- Division: First (77.5 %)

RESEARCH INTERESTS

Machine Learning, Deep Learning, Generative Modelling, Computer Vision

TECHNICAL SKILLS

C, C++, Python, Java, Shell Scripting, \LaTeX , R, MatLab, GNU Octave, NLTK Scikit-Learn, Keras, TensorFlow, PyTorch, DialogFlow, NVIDIA Jetson TX2, OpenCV

PUBLICATIONS	<ul style="list-style-type: none"> ❑ Pandey, K, Mukherjee, A, Rai, P & Kumar, A 2022, '<i>DiffuseVAE: Efficient, Controllable and High-Fidelity Generation from Low-Dimensional Latents</i>', in arXiv preprint arXiv:2201.00308 ❑ Pandey, K, Mukherjee, A, Rai, P & Kumar, A 2021, '<i>VAEs meet Diffusion Models: Efficient and High-Fidelity Generation</i>', in NeurIPS 2021 Workshop on Deep Generative Models and Downstream Applications. ❑ Mukherjee, A, Patro, BN, Sidheekh, S, Singh, M, & Namboodiri, VP 2021, '<i>Attentive Contractive Flow with Lipschitz-Constrained Self-Attention</i>', in SSRN 3981371. ❑ Mukherjee, A & Basu, T 2018, '<i>A medoid-based weighting scheme for nearest-neighbor decision rule toward effective text categorization</i>', in SN Applied Sciences 2, pp. 1-9. ❑ Mukherjee, A & Basu, T 2018, '<i>An Effective Nearest Neighbor Classification Technique Using Medoid Based Weighting Scheme</i>', in Robert Stahlbock, Gary M. Weiss, Mahmoud Abou-Nasr, Proceedings of the 2018 International Conference on Data Science, pp. 231-4.
PROJECT WORKS	<ul style="list-style-type: none"> • Predicting PM2.5 concentration from satellite images and meteorological features: The project aims to develop algorithms to predict particulate concentration in areas such as Delhi, Lucknow or Beijing using satellite images and meteorological features like air temperature, pressure or relative humidity. • Event Recognition On Unconstrained Videos: Unconstrained videos are considered and an algorithm is developed taking only spatial features from the frames to identify what is happening in those videos. <i>This project was awarded a special mention among other projects in the summer school.</i> • Empirical Analysis of various Machine Learning and Deep Learning Algorithms on different Domains: A course project for the course CS771A: Introduction to Machine Learning. • A Conversational Assistant for the CSE Department at IIT Kanpur : A course project for the course CS727: Topics in Internet Technologies. • Assisting in Disaster Management by Analyzing Micro-blogs: A course project for the course CS685: Data Mining • Drone Swarm Development for Humanitarian Assistance and Disaster Relief: Worked in the vision team that detects person(s) from a height between 50 and 80 metres in real-time and delivers a payload within a threshold radius.
VOLUNTEERING ACTIVITIES	<ul style="list-style-type: none"> • PG Coordinator for Association for Computing Activities, CSE since 2019. • System Administrator of the CSE Servers under Prof. Arnab Bhattacharya. • Core Team Member (Web Designer) of Spic Macay, IIT Kanpur Chapter. • Academic Mentor of some UG CSE Students at IIT Kanpur. • Former Volunteer in Counselling Service, IIT Kanpur.
RELEVANT ACHIEVEMENTS	<ul style="list-style-type: none"> • Qualified NET examination with Lectureship. • M.Sc Gold Medalist. • Got Selected for Admission to PhD Programme in IIT Gandhinagar and IIT Patna • Qualified GATE 2018 with 95.62 Percentile. • Google India Challenge Scholarship Awardee.
PERSONAL INFORMATION	<p>Date of Birth: November 27, 1995</p> <p>Languages Known: English, Bengali (Read/Write/Speak), Hindi (Speak only)</p>