

Omprakash Chakraborty PhD Scholar

The Centre for Excellence in Artificial Intelligence (CoEAI)
Indian Institute of Technology Kharagpur
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Research Interests:

Computer Vision (Action Recognition, Vision and Language based multi-modal Learning, Object detection in videos and Semantic segmentation)

Deep Learning (Efficient learning, Learning with limited labels and Limited compute resources)

Education:

PhD, Centre for Excellence in Artificial Intelligence(2019-Present) Indian Institute of Technology Kharagpur Topic: Semi and Un-Supervised Representation Learning for Efficient Video Understanding Guide: Prof. <i>Abir Das</i> , Department of Computer Science and Engg., IIT Kharagpur	ongoing
MS, Computer Science and Engineering(2015-2018) Indian Institute of Technology Kharagpur Topic: Multi-Criteria based Network Analysis for Disaster Mangement Guide: Prof. <i>Soumya K. Ghosh</i> , Department of Computer Science and Engg., IIT Kharagpur Prof. <i>Pabitra Mitra</i> , Department of Computer Science and Engg., IIT Kharagpur	9.44/10
B.Tech in Information Technology(IT)(2011-2015) Haldia Institute of Technology, Haldia, West Bengal University of Technology	8.67/10
Higher Secondary Examination (2009-2011) Kendriya Vidyalaya, Haldia, West Bengal CBSE-AISSCE	89.4 %
Secondary Examination (2008-2009) The Assembly Of God Church School, Haldia, West Bengal ICSE	93 % (best of 5)

Experience:

Dec'19 - present	Teaching Assistant for Deep Learning(DL) with 70+ students for every semester in which the course was offered
Jun'16 - present	Teaching Assistant for Programming and Data Structure(PDS), with 90+ students for every semester in which the course was offered
Jun'18 - June'19	Junior Research Fellow at Department of Computer Science and Engg., IIT Kharagpur.
Jun'15 - June'18	Junior Research Fellow at Department of Computer Science and Engg., IIT Kharagpur.
Dec'16 - Jun'17	Teaching Assistant for Relational Database Management Systems(RDBMS) with 90+ students
Jun'18 - Jun'19	Teaching Assistant for Machine Learning (ML), assisting Prof. Pabitra Mitra, with 80+ students
Dec'16 - Jun'17	Teaching Assistant for Online Data Mining, NPTEL Course

Selected Publications:

- AnyDA: Anytime Domain Adaptation**,
O Chakraborty, Aadarsh Sahoo, Rameswar Panda, Abir Das
International Conference on Learning Representations (ICLR), 2023.
- Semi-Supervised Action Recognition with Temporal Contrastive Learning**,
O Chakraborty, *Ankit Singh*, Ashutosh Varshney, Rameswar Panda, Rogerio Feris, Kate Saenko, Abir Das
Computer Vision and Pattern Recognition (CVPR), 2021
- Multi-facilities based Road Network Analysis for Flood Hazard Management**,
O Chakraborty, P Mitra, S K. Ghosh
Journal of Spatial Science, 2019

- (d) **Multi-objective based road-link grading for health-care access during flood hazard management** ,
O Chakraborty, Yeshwanth V, P Mitra, S K. Ghosh
International Conference on Computational Science and Its Applications(ICCSA), 2018
- (e) **A Multi-objective Framework for Assessment of Road Network Vulnerability and Facility Location for Flood Hazard**,
O Chakraborty, A Das, A Dasgupta, P Mitra, S K. Ghosh, T N. Mazumdar
Transactions in GIS, 2017
- (f) **A Geospatial Service Oriented Framework for Disaster Risk Zone Identification**,
O Chakraborty, J Das, A Dasgupta, P Mitra, S K. Ghosh
International Conference on Computational Science and Its Applications(ICCSA), 2016

Awards and Achievements:

- (a) Joint Runner's Up for **ACM Kolkata Chapter Best BTech (CS/IT) Dissertation Award**
- (b) **Topper of I.T. Department**, from 6th semester onwards (W.B.U.T.).
- (c) AAT: Obtained 8th **rank all over India** in Chemistry in the National Achievement and Aptitude Test.
- (d) Ranked among the **Top 25** who qualified for **Overnite, the ICPC based Programming Contest**, Kshitij, IIT-Kharagpur

Workshops Organized:

- The *Dynamic Neural Networks Meets Computer Vision* Workshop, CVPR (**2021, 2022**).
- Conducted yearly workshops on Geospatial Data Modeling, Registry Services and Mobile Apps for GI Application for Government Officials from sixteen National Agencies - Worked with a team of 6, and headed the GIS based Registry Service Development Session (July 2016). Organized an earlier phase of the same workshop in March 2016

Professional Services:

- Reviewer for Association for the Advancement of Artificial Intelligence (AAAI), Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP)

Extra Curricular Activities:

- Won many medals in various sports events which include basketball and athletics.
- Active part in Anti-Ragging Committee.
- Interested in singing and other music related activities.