

Anjan Chowdhury

PHD (CS), M.TECH. (CSE), B.E. (CSE)

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Summary

I am currently an assistant professor in the Computer Science department at IIT (ISM) Dhanbad. I received B.E.(CS) from the Bengal Engineering and Science University in Shibpur and M.Tech.(CS) from IIT Bombay. I completed my doctoral studies in computer science at ISI Kolkata. I have been awarded the Chanakya postdoctoral fellowship at IIT Kharagpur. My research interests encompass complex networks and the human brain.

Personal Information

Date of Birth: 30-12-1988
Permanent Address: Goda, JelePara, P.O.: Lakurdi, P.S.: Burdwan, Dist: Purba Burdwan, W.B. - 713102

Education

Degree/Exam	Secondary (10 th)	Higher Secondary (12 th)	B.E (CSE)	M.Tech (CSE)	PhD (CS)	PostDoc
Year	2005	2007	2007-2011	2015-2017	2017 - 2024	2024 (Nov)- 2025(Feb)
Institute	Burdwan Sri Ramkrishna Saradap- ith Uchcha Vidyalaya	Burdwan Sri Ramkrishna Saradapith Uchcha Vidyalaya	Bengal En- gineering and Science University (IEST)	IIT Bombay	ISI Kolkata	IIT Kharag- pur
University/ Board	WBBSE	WBCHSE	BESU	IIT Bombay	ISI Kolkata	IIT Kharag- pur
GPA/Percentage	79.6%	85.4%	79.4%	7.44 (10)	70%	NA

Skills

Languages	Python, Java, JavaScript, C, C++, PHP, Html, CSS
Frameworks	Pytorch, PyG, Django, Docker
Operating systems	Windows, Linux
IDE	Eclipse
RDBMS	MySQL, PostgreSQL
Tools	numpy, pandas, streamlit, sed, awk, grep, selenium, nilearn, fMRI-Prep, fsl
Others	Machine Learning, Deep Learning, NLP, Computer vision, Graph Neural Network (GNN), Hugging Face, Web scrapping

Experience

DURING-PHD EXPERIANCE

Senior Research Fellow at ISI, Kolkata

BT Road, Bonhoogli, Kolkata
August 2017 - August 2024

- I am skilled at working with complex networks, including GNN, NLP, and web-scraping.
- I also have experience with MRI and fMRI datasets and tools like fMRI prep, fsl etc.

PGT CS, KV2, Binnaguri

Binnaguri, Jalpaiguri
November 2023 - October 2024

- During my PhD, I got selected at Kendriya Vidyalaya Sangathan (KVS).
- I taught CS and AI there.

PRE-PhD EXPERIENCE

Software Engineer at Interra Information Technologies Pvt. Ltd.

Salt Lake, Sector V, Kolkata

July 2011 - May 2013

- I worked as a web developer on a project named "State Service Delivery Gateway" (SSDG).
- Later I promoted as a team leader.
- Client: Government of Arunachal Pradesh

Papers

Conferences

- Anjan Chowdhury, Sriram Srinivasan, Sanjukta Bhowmick, Animesh Mukherjee, and Kuntal Ghosh. "Constant community identification in million scale networks using image thresholding algorithms." In Proceedings of the 2021 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM'21), pp. 116-120. <https://doi.org/10.1007/s13278-022-00895-8>, 2021.
- Anjan Chowdhury, Swarup Chattopadhyay, and Kuntal Ghosh. "Analyzing the Progression of Alzheimer's Disease in Human Brain Networks." In Proceedings of the 2023 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM'23), pp. 415-418. <https://doi.org/10.1145/3625007.3627496>, 2023.
- Anjan Chowdhury, Rajdeep Chatterjee, Geetanjali Aich, and Kuntal Ghosh. "ADHDNet: A DNN based Framework for Efficient ADHD Detection from fMRI Dataset." In 9th International Conference on Pattern Recognition and Machine Intelligence (PREMI'21), Lecture Notes in Computer Science. Springer, A. Ghosh et al. (Eds.): Volume 13102, Chapter 15, <https://link.springer.com/book/9783031126994>, 2024.
- Anjan Chowdhury, Swarup Chattopadhyay, Kuntal Ghosh, and Gautam Das. "NeuroANATOP: An Effective Tool to Assess the Progression of Alzheimer's disease in Human Brain Networks", Proceedings of 2023 IEEE International Conference On Knowledge Graph (ICKG), pp. 108-116, <https://doi.org/10.1109/ICKG59574.2023.00019>, 2023.
- Rajdeep Das, Anjan Chowdhury, Kuntal Ghosh, and Tapan Chakraborty. "SPGMS: an annotated benchmark for grain-matrix segmentation in sandstone photomicrographs." In Eighth International Conference on Video and Image Processing (ICVIP 2024), vol. 13558, pp. 147-158. SPIE, 2025.

Journals

- Anjan Chowdhury, Sriram Srinivasan, Sanjukta Bhowmick, Animesh Mukherjee, and Kuntal Ghosh. "Constant community identification in million-scale networks." Social Network Analysis and Mining 12, no. 1 (2022): 70, <https://doi.org/10.1007/s13278-022-00895-8>, 2022.
- Anjan Chowdhury, Sriram Srinivasan, Sanjukta Bhowmick, Animesh Mukherjee, and Kuntal Ghosh. "Improving Node Classification Accuracy of GNN through Input and Output Intervention." The ACM Transactions on Knowledge Discovery from Data (TKDD), Volume 18, Issue 1, Article No. 17, pp. 1-31, <https://doi.org/10.1145/3610535>, 2023.
- Snigdha Agarwal, Adarsh Raj, Anjan Chowdhury, Rajdeep Chatterjee, Geetanjali Aich, and Kuntal Ghosh. "Investigating the Impact of Standard Brain Atlases and Connectivity Measures on the Accuracy of ADHD Detection from fMRI Data Using Deep Learning.", Multimedia Tools and Applications, Volume 83, pp. 67023-67057 <https://doi.org/10.1007/s11042-023-17962-7>, 2024.
- Ritwick Mondal and Shramana Deb and Gourav Shome and Anjan Chowdhury and Kuntal Ghosh and Julián Benito-León and Durjoy Lahiri, "Deciphering seizure semiology in corpus callosum injuries: A comprehensive systematic review with machine learning insights.", Clinical Neurology and Neurosurgery, volume = 242, Year = 2024, pages = 108316 <https://doi.org/10.1016/j.clineuro.2024.108316>
- Deb S, Mondal R, Sen P, Chowdhury D, Sarkar S, Banerjee G, Sarkar V, Chowdhury A, Benito-León J. Neuroinflammatory disorders of the central nervous system associated with monkeypox virus: a systematic review and call to action. BMC Med. 2025 Feb 12;23(1):86. doi: 10.1186/s12916-025-03921-6. PMID: 39939881; PMCID: PMC11823248.
- Banerjee, S., Mondal, R., Deb, S., Shome, G., Chakraborty, S., Saha, C., Pandit, A., Sen, G., Bhattacharya, S., Sen, P. and Bhattacharya, N.P., 2026. Integrated molecular and clinical profiling of primary mitochondrial oxidative phosphorylation disorders in an Indian cohort: Insights from genetics, neuroimaging, and machine learning. Mitochondrion, p.102150.

Book Chapter

- Swarup Chattopadhyay, Anjan Chowdhury, and Kuntal Ghosh. "Application of Machine-Learning Techniques in the Development of Neighbourhood-Based Robust Recommender Systems." In Recommender Systems, pp. 203-233. CRC Press, <https://doi.org/10.1201/9781003319122-13>, 2023.

Professional References

Doctoral advisors (joint)

- Dr. Kuntal Ghosh, Associate Professor, ISI, Kolkata (kuntal@isical.ac.in)
- Dr. Sanjukta Bhowmick, Associate Professor, University of North Texas (sanjukta.bhowmick@unt.edu)