Kiran Purohit

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Google Scholar, Reasearch Gate

EDUCATION

IIT Kharagpur

West Bengal, India

Ph.D. Scholar (Chanakya Fellow), Computer Science & Engineering

2020 - 2025

Supervisor: Prof. Sourangshu Bhattacharya; Research Areas: Trustworthy and Scalable AI

NIT Durgapur
M.Tech, CGPA: 9.15/10

West Bengal, India
2018–2020

THDC-IHET

Uttarakhand, India

B.Tech, Percent: 75.9 2013–2017

KV Faridkot
Punjab, India

12th Science, Percent: 84.4 2012–2013

PUBLICATIONS

- [1] **K. Purohit**, S. Das, S. Bhattacharya, and S. Rana, "Learndefend: Learning to defend against targeted model-poisoning attacks on federated learning", in arXiv preprint arXiv:2305.02022, 2023 (Submitted).
- [2] **K. Purohit**, A. Parvathgari, and S. Bhattacharya, "A greedy hierarchical approach to whole-network filter-pruning in cnns", 2024 (Submitted).
- [3] **K. Purohit**, Raghuram, Krishna, Venktesh, S. Bhattacharya, and A. Anand, "Robust and efficient exemplar selection for in-context learning", 2024 (Submitted).
- [4] **K. Purohit**, Anurag, Soumi, and Sourangshu, "Accurate and efficient channel pruning via orthogonal matching pursuit", in *Second International Conference on AIML Systems*, 2023, ISBN: 978-1-4503-9847-3.
- [5] **K. Purohit**, A. Kesarwani, D. Ranjan Kisku, and M. Dalui, "Covid-19 detection on chest x-ray and ct scan images using multi-image augmented deep learning model", in *Seventh International Conference on Mathematics and Computing*, Springer Nature Singapore, 2022, pp. 395–413, ISBN: 978-981-16-6890-6.
- [6] **K. Purohit**, O. Iqbal, and A. Mullick, "Reproducibility report: Contextualizing hate speech classifiers with post-hoc explanation", in arXiv preprint arXiv:2105.11412, 2021.
- [7] A. Kesarwani, K. Purohit, M. Dalui, and D. R. Kisku, "Measuring the degree of suitability of edge detection operators prior to an application", in *Applied Signal Processing Conference*, 2020, pp. 128–133.

EXPERIENCE

Virginia Tech - IIT Kharagpur Virgina & West Bengal, India Teaching Assistant: Joint Certification Program In Business Analytics and AI Dec 2023 - Sep 2024

Indian Institute of Technology Kharagpur

West Bengal, India

Teaching Assistant: Mentored B.Tech and M.Tech students in Term Projects

Dec 2020 - Current

National Institute of Technology Durgapur West Bengal, India
Teaching Assistant: Helped B.Tech students in Lab assignments

Jul 2019 - Jun 2020

Defence Research and Development Organisation (DRDO)

Trainee: Developed a website for automation of complaints registered.

Uttrakhand, India Jun 2016 - Jul 2016

PROJECTS

Course Content Management System (CCMS) (2017)

Worked on this project in B.Tech using Front End-PHP & Back End-MySql It provides framework for teaching and management of online course content.

SeasonsWay: Shopping Site (2016)

Worked on this Project in B.Tech using Front End-JSP & Back End-MySql A shopping website that is mainly for the locals of Tehri and Baurari.

Network Docket Management System (2016)

Worked on this Project at **DRDO** using Front End-ASP & Back End-Oracle Generates a distinct docket number for every complaint registered with date.

SCHOLARSHIPS & AWARDS

• Prime Minister's Scholarship Scheme for CAPF & Assam Rifles	2013-2017
• BSF Director General's Merit Scholarship	2013-2014
• MHRD Gate Scholarship	2018-2020
• Institute Fellowship for PhD	2020 – 2025
• AI4ICPS Chanakya PhD Fellowship	2024 - 2025

TECHNICAL SKILLS

- Programming Languages: C, C++, Python, Java, PHP, ASP, C#, HTML, CSS
- Frameworks: Pytorch, Tensorflow, Keras, spacy, nltk, scikit-learn, Pandas, numpy

Popular / News Articles / Media Coverage

- COVID-19 Detection, Genomics & Health Impact Weekly Scan PHGKB, Jul 2020. Our paper got enlisted in the Centers for Disease Control & Prevention under the US Department of Health.
- COVID-19 Detection Literature Situation Report, Our COVID-19 work was featured in the Daily Newsletter of the Department of Global Health, University of Washington.

EXTRACURRICULAR ACTIVITIES

- English Debate, English Essay Writing, Hindi Extempore Speech, Quiz Competition, Science Quiz Competition, Sanskrit Shloka Recitation, Calligraphy, Hindi Essay Writing, Mono Acting and Group Song.
- Yoga, Swimming and Table Tennis enthusiast

REFERENCES

- Dr. Sourangshu Bhattacharya, Associate Professor in CSE, IIT Kharagpur, sourangshu@cse.iitkgp.ac.in
- Dr. Avishek Anand, Associate Professor in the Software Technology, TU Delft, Avishek.Anand@tudelft.nl
- Dr. Santu Rana, Associate Professor in Computer Science, Deakin University, Australia, santu.rana@deakin.edu.au
- Mr. Ravi Shanker Sharma, Scientist-D in DEAL-DRDO, Dehradun, ravissharma@deal.drdo.in