



Anand Kumar Rai

PhD Candidate, IIT Kharagpur



(+91) -90510 45490



raianand.1991@gmail.com

Education

PhD in Computer Science and Engineering	Aug 2022-Present
<i>Indian Institute of Technology, Kharagpur, India (CGPA: 8.1/10)</i>	
M.Tech. in Data Science	2018-21
<i>Indian Institute of Technology, Hyderabad, India (CGPA: 8.94/10)</i>	
B.Tech in. Computer Science and Engineering	2008-12
<i>Indian Institute of Information Technology, Jabalpur, India (CGPA: 9.1/10)</i>	
Intermediate [CBSE Board]	2006-08
<i>Central Hindu Boys School, BHU, Varanasi, India (Marks: 89.6%)</i>	
Matriculation [CBSE Board]	2005-06
<i>Crescent Convent School, Dildarnagar, Ghazipur, India (Marks: 92.4%)</i>	

Interests

Speech Technologies primarily ASR, Fairness in Speech Recognition

Publications

[A Deep Dive into the Disparity of Word Error Rates Across Thousands of NPTEL MOOC Videos](#)

Anand Kumar Rai, Siddharth D Jaiswal, Animesh Mukherjee

The 15th International AAAI Conference on Web and Social Media (ICWSM, 2024)

[DENOASR: Debiasing ASRs through Selective Denoising](#)

Anand Kumar Rai, Siddharth D Jaiswal, Shubham Prakash, Bendi Pragnya Sree, and A. Mukherjee

The 18th International Conference on Knowledge Graphs (ICKG, 2024)

[ASR-FAIRBENCH: Measuring and Benchmarking Equity Across Speech Recognition Systems](#)

Anand Kumar Rai, Satyam Rahangdale, Utkarsh Anand, and A. Mukherjee

The 26th InterSpeech Conference (2025)

Professional Experience

Joint Plant Committee (JPC), Ministry of Steel, Govt. of India	New Delhi
<i>Deputy Manager</i>	<i>Feb 2015 - Current</i>
<ul style="list-style-type: none">• Development , Maintenance & Deployment of Iron & Steel Dashboard , Analytical Reports and APIs for dissemination of reports• Developed an interface for querying Iron & Steel database using natural language• Areas of work: Business Intelligence, Web Development, Natural language Processing	

AmadaSoft India Pvt Ltd **Chennai**

Software Developer

Jan 2014- Jan 2015

- Development of fast and secure API for CAD and CAM File Management
- Areas of work: Encryption, Backend Development using C++

Amada Co., Japan **Tokyo**

Software Developer

Aug 2012 – Sep 2013

- Development of desktop application for File management in an Embedded System
- Areas of work: Desktop App Development

S & P Capital IQ **Hyderabad**

Intern

May 2011 –Nov 2011

- Development of workflow tracker tool for managers for evaluating their team performance
- Areas of work: Desktop App Development , OLAP Cube

Academic Projects

TEMPSQL: Template based Text-to-SQL generation on single source database [Master's Thesis]

Advisor : Prof. Maunendra S Desarkar *Jan 2021 – Jun 2021*

- Development & Deployment of Attention-Based Seq2Seq model trained on augmented Text-SQL pairs
- Research Areas: Attention Mechanism, Seq2Seq Model , Language Modelling

RELALG: Design of Relational Algebra Dialect using MLIR compiler ecosystem

Advisor : Prof. Ramakrishna Upadrashta *Aug 2020 – Dec 2020*

- Analysis of MLIR compiler framework and design of lowering Relational Algebra operations to low-level instructions
- Research Areas: LLVM , Compiler Development

CoVID related Hate Speech Detection on Tweet dataset

Advisor : Prof. Maunendra S Desarkar & Prof Srijith *Jan 2020 –Jun 2020*

- Development of LSTM based model is trained on the manually annotated CoVID related dataset. The developed module can classify the tweet as hate/non-hate , categorize hate category and identify hate target.
- Research Areas: LSTM , Sentiment Analysis

e-Public Distribution Monitoring System

Advisor : Prof. Atul Gupta *Jan 2011 – April 2011*

- Development of Object-Oriented based e-PDMS software system with an aim to bring transparency in Public Distribution Scheme operated by State Govts.
- Research Areas: OOP Practices, UML Modelling, Web development

Scholastic Achievements

- District Topper in CBSE Board Matriculation Examination in the year 2006
- Rank among top 1% in about 10,00,000 students appeared for AIEEE-2008

- Awarded for Academic Excellence by MHRD in two consecutive academic sessions, 2008-09 and 2009-10
- Qualified GATE in 2011 with AIR under 1300
- Qualified UGC-NET in Computer Science with Junior Research Fellowship in 2022

Positions of Responsibility

- Asst. Coordinator of Counselling Committee at IIITDM Jabalpur
- Coordinator of Literary Club at IIITDM Jabalpur
- Volunteered Aksharmaala Program meant for tutoring students from rural govt. schools
- Reviewer of CSCW 2024, IEEE INDICON 2024, IEEE INDISCON 2025

The above-mentioned information is best of my knowledge.

Date: 27th Aug 2025

Anand Kumar Rai