# Abdullah Mazhar PhD Scholar at FLAME Lab, IIIT Delhi, India

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A second-year PhD student at IIIT Delhi, working with Dr. Md. Shad Akhtar at FLaMe Lab, focusing on NLP/Deep Learning for Responsible AI in mental health. As an NLP researcher, I aim to advance AI systems that are not only effective but also ethically responsible, particularly in sensitive areas like mental health support.

## Education

### Indraprastha Institute of Information Technology (IIIT Delhi), Delhi

2023 - PRESENT

PhD in Computer Science and Engineering (CSE) **Thesis:** Responsible and Safety AI in Mental Health

Supervisor: Dr. Md. Shad Akhtar

#### INSTITUTE OF ENGINEERING AND RURAL TECHNOLOGY

2015 - 2019

B.Tech in Computer Science and Engineering (CSE) | Agg: 72.3% Thesis: Twitter Sentiment Analysis system using Text Blob and Tweepy.

## **Publications**

#### **ACM WWW 2025**

# Figurative-cum-Commonsense Knowledge Infusion for Multimodal Mental Health Meme Classification

Understanding Mental Health in Memes: We introduce AxiOM, a novel dataset designed for fine-grained anxiety symptom classification in memes. To enhance the figurative understanding of Multimodal Language Models, we propose M3H, a commonsense-enriched framework that integrates domain knowledge. Our approach surpasses competitive baselines, improving both anxiety and depression symptom identification through comprehensive quantitative and qualitative evaluations.

Accepted-Oral

#### Neurips 2025

Disentangling Expert Contributions : An Interpretable Approach to Language Model Behavior in Toxic Content Moderation

Under-Review

#### KDD 2025

Evaluating Therapeutic Qualities: A Framework for Analyzing Mental Health Dialogue Dynamics

Under-Review

# **Experience**

PROJECT OFFICER SEP 2022 - DEC 2023

### IIT MADRAS | CHENNAI

Contributed to the development of Text-to-Speech (TTS) systems for Indian languages using Deep Learning techniques. Build a Text-to-Speech (TTS) system for Indian languages to provide technical education in rural areas, utilizing advanced speech synthesis techniques.

ASR TTS

DATA SCIENTIST

MAY 2021 - SEP 2022

#### BIRLASOFT LTD. | NOIDA, India

Developed an end-to-end solution to automate the insurance claim process by digitizing claim forms using neural networks and machine learning techniques. Implemented a model-driven recommendation system to assist in business decision-making for claim approvals. Enhanced customer support through Azure-based solutions, leveraging Chatbot, QnA Maker, and LUIS for seamless interaction and query resolution.

MACHINE LEARNING DJANGO REACTJS AZURE AT

SOFTWARE DEVELOPER AUG 2020 - AUG 2021

### ANALYTICS2AI | GURGAON

Developed an automated tool built on Python Django Web Framework that updates the customers on product delivery status by extracting email from their Gmail Inbox (via Gmail API) and notifies customers on Whatsapp at scheduled intervals.

DJANGO REACTJS

# Projects

# Bhashini | Speech Models for Indian Languages (IIT Madras)

2022-2023

Contributed to the development of Text-to-Speech (TTS) systems for Indian languages using DeepLearning techniques. Conducted extensive experimentation and tuning of TTS models to improve their overall performance and achieve natural-sounding speech for Indian Languages.

ASR TTS

# Automation

## Insurance Automation System(Birlasoft)

2021-2022

Build a Submission automation solution that automate the insurance claim process by digitizing the claim forms using neural network and machine learning technology and provides the model recommendation to take business decisions on approval process. Customer support using Azure chatbot, QnA maker and LUIS.

Azure Al Django ReactJS

#### Ezzytalk

#### Analytics2AI 2020-2021

Designed and Developed an automated tool built on Python Django Web Framework that updates the customers on product delivery status by extracting email from their Gmail Inbox (via Gmail API) and notifies customers on Whatsapp at scheduled intervals.

Django ReactJS

# **CERTIFICATIONS**

Foundation of Data Science by PadhAl One Fourth Lab.

Microsoft Azure Al 900.

Applied Machine Learning by Applied AI.

Diango Masterclass by Udemy.

#### **AWARDS**

2025 Received ACM India Grant to present our WWW '25 paper in SYDNEY, AUSTRALIA.

2025 Received Microsoft India Grant to present our WWW '25 paper in SYDNEY, AUSTRALIA.

2025 Received Google Research Grant to present our WWW '25 paper in SYDNEY, AUSTRALIA.

#### Skills

Interests NLP - Dialogue Systems, Deep Learning, Machine Learning, Human Behavior, LLMs, PostTrai-

ning, RL, LoRA, PEFT

**Technical** Python, PyTorch, LLMOps, Git, Azure Al

Web Django, ReactJS, Flask, PostgreSql

Database PostgreSQL, Sqlite, MySQL

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# References

Dr. Md. Shad Akhtar

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