# Mohit Singh Tomar

⌂ Homepage   ✉ mohitsinghtomar9797@gmail.com   ⊙ Github   🎓 Google Scholar

## Education

**Indian Institute of Technology Patna**                                                        June 2020
*Bachelor of Technology in Electrical Engineering CPI- 7.41*

**Royal Higher Secondary School**                                                               May 2015
*MP Board of Secondary Education (10+2) Percentage- 87%*

**St. Aloysius Senior Secondary School**                                                        May 2013
*CBSE (High School) CGPA- 9.6*

## Experience

**AI-NLP-ML Lab IIT Patna**                                                         Sep 2022 – July 2023
*Junior Research Fellow | Advisor: Prof. Sriparna Saha*                                     *Patna, India*

- Studied the relation between Sarcasm and Dialogue Acts and the role of modality order fusion in these two classification tasks in a multi-modal dialogue setting.
- Developed Plant Care Conversation dataset. It has conversations between user and agent regarding queries related to plants in multi-modal scenarios and build the multi-modal plant care assisting dialogue generation model.
- Studied the role of knowledge graph and patient self-report for disease diagnosis from the conversation between doctor and patient.

**OYO Rooms**                                                                       Aug 2020 – Jun 2021
*Software Developer Engineer-1*                                                               *Remote*

- Worked with HMS team, developed and maintained backend services for generating reports in OYO OS.
- Used Java, Spring, Spring boot, Microservice Architecture to develop the backend features of OYO OS.
- Worked with PostgreSQL, MongoDB and ElasticSearch databases.

## Accepted Publications

**Mohit Tomar**, Abhisek Tiwari, Tulika Saha, Prince Jha, Sriparna Saha. An EcoSage Assistant: Towards Building A Multimodal Plant Care Dialogue Assistant (European Conference on Information Retrieval ECIR 2024). [**Paper**] [**Code**]

**Mohit Tomar\***, Abhisek Tiwari\*, Tulika Saha, Sriparna Saha. Your tone speaks louder than your face! Modality Order Infused Multi-modal Sarcasm Detection. In Proceedings of the 31st ACM International Conference on Multimedia 2023 Oct 26 (pp. 3926-3933). [**Paper**] [**Code**]

## Under Review Publications

**Mohit Tomar**, Tulika Saha, Abhisek Tiwari, Sriparna Saha. Action and Reaction go hand in hand! A Multi-modal Dialogue Act Aided Sarcasm Identification (LREC-Coling 2024).

**Mohit Tomar\***, Abhisek Tiwari\*, Sriparna Saha. Towards Knowledge-Infused Automated Disease Diagnosis Assistant (Scientific Reports).

Akash Ghosh, **Mohit Singh Tomar**, Abhisek Tiwari, Sriparna Saha, Jatin Avinash Salve, Setu Sinha. From Sights to Insights: Towards Summarization of Multimodal Clinical Queries (ARR).

## Projects

**Dialogue Graph Encoding [Code] | *Pytorch***                                                   July 2022

- Created Dialogue Graph from dialogue between patient and doctor.
- Applied Graph Attention Network to generate dialogue embedding for medication recommendation.

**Graph Attention Network for licit/illicit transaction. [Code] | *Pytorch***                    June 2022

- Bitcoin dataset from Kaggle is used for training graph attention network.
- It is node level classification task to determine licit/illicit transactions.

## ONLINE CERTIFICATIONS

**Applied Machine Learning in Python** [Link]     January 2021
**Deep Learning** [Link]     August 2021
**Natural Language Processing** [Link]     March 2022
**AI for Medical Diagnosis & AI for Medical Prognosis** [Link1] [Link2]     April 2022
**Build Basic GANs & Build Better GANs** [Link1] [Link2]     May 2022