

# Unleashing the Power of Large Language Models: A Hands-On Tutorial

Payel Santra<sup>1</sup>, Madhusudan Ghosh<sup>1</sup>, Shrimon Mukherjee<sup>1</sup>, Debasis Ganguly<sup>2</sup>, Partha Basuchowdhuri<sup>1</sup>, Sudip Kumar Naskar<sup>3</sup>

<sup>1</sup>Indian Association for the Cultivation of Science

<sup>2</sup>University of Glasgow

<sup>3</sup>Jadavpur University



**FIRE 2023**

Forum for Information Retrieval Evaluation

December 27, 2023

# Plan of the Tutorial

- 1 Plan of the Tutorial
- 2 Introduction to NLP
- 3 Overview of Distributional Representation Learning for NLP
- 4 Overview of Transformer based Language Model
- 5 Overview of Large Language Models
- 6 Concept of in-context learning and its application
- 7 Conclusion

# Plan of the Tutorial

- 1 Plan of the Tutorial
- 2 Introduction to NLP
- 3 Overview of Distributional Representation Learning for NLP
- 4 Overview of Transformer based Language Model
- 5 Overview of Large Language Models
- 6 Concept of in-context learning and its application
- 7 Conclusion

# Plan of the Tutorial

- ① Introduction to NLP
  - Sudip Kumar Naskar
- ② Overview of Distributional Representation Learning for NLP
  - Partha Basuchowdhuri
- ③ Overview of Transformer-based Pretrained Language Model
  - Madhusudan Ghosh
- ④ Overview of Large Language Models
  - Payel Santra
- ⑤ Concept of in-context learning and its application
  - Debasis Ganguly
- ⑥ Hands-on Coding/Demo Session
  - Debasis Ganguly, Shrimon Mukherjee, Madhusudan Ghosh, & Payel Santra