Suman Adhya

PhD Scholar at SMCS in IACS

⧉ adhyasuman.github.io @ adhyasuman30@gmail.com
🔗 linkedin.com/in/adhyasuman ⌨ AdhyaSuman 🎓 Google Scholar
📍 Jadavpur, Kolkata-700032, West Bengal, India
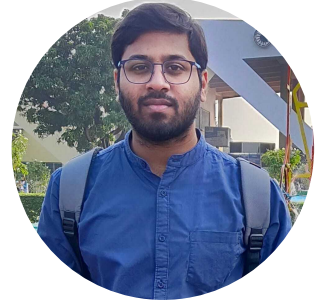
ⓘ Short Bio

A fourth-year Ph.D. student at SMCS in IACS, under the supervision of Dr. Debarshi Kumar Sanyal. I am currently working in the field of NLP, specifically on topic models that are used to extract topics from document corpora in an unsupervised manner.

🏛 Education

Oct 2020 **Sep 2025***	**Indian Association for the Cultivation of Science** Ph.D. from the School of Mathematical & Computational Sciences (SMCS)	**Kolkata, India**
Aug 2018 **Jul 2020**	**Indian Association for the Cultivation of Science** M.Sc. in Mathematics & Computing from SMCS	**Kolkata, India**
2015 **2018**	**Serampore College, University of Calcutta** B.Sc.(Hons.) in Mathematics	**Kolkata, India**

📖 Publications

J=Journal, C=Conference, W=Workshop

[J] Evaluating Negative Sampling Approaches for Neural Topic Models [%]
Suman Adhya, Avishek Lahiri, Debarshi Kumar Sanyal, and Partha Pratim Das
IEEE Transactions on Artificial Intelligence   **[IEEE-TAI]**

[C] GINopic: Topic Modeling with Graph Isomorphism Network [%]
Suman Adhya and Debarshi Kumar Sanyal
North American Chapter of the Association for Computational Linguistics, Mexico City, Mexico   **[NAACL'24]**

[C] Do Neural Topic Models Really Need Dropout? Analysis of the Effect of Dropout in Topic Modeling [%]
Suman Adhya, Avishek Lahiri, and Debarshi Kumar Sanyal
17th European Chapter of the Association for Computational Linguistics, Dubrovnik, Croatia   **[EACL'23]**

[C] Improving Neural Topic Models with Wasserstein Knowledge Distillation [%]
Suman Adhya and Debarshi Kumar Sanyal
45th European Conference on Information Retrieval, Dublin, Ireland   **[ECIR'23]**

[C] Improving Contextualized Topic Models with Negative Sampling [%]
Suman Adhya, Avishek Lahiri, Debarshi Kumar Sanyal, and Partha Pratim Das
19th International Conference on Natural Language Processing, New Delhi, India   **[ICON'22]**

[W] What Does the Indian Parliament Discuss? An Exploratory Analysis of the Question Hour in the Lok Sabha [%]
Suman Adhya and Debarshi Kumar Sanyal
1st Workshop on Natural Language Processing for Political Sciences, LREC, Marseille, France   **[PoliticalNLP @ LREC'22]**

⚙ Skills

Research Interests	NLP - Topic Modeling, Machine Learning - Variational Inference, Information Theory - Rate–Distortion Theory
Technical Expertise	Python, PyTorch and PyG, Deep Graph Library, TensorFlow, Git

💬 Presentations

> NAACL 2024, Poster Presentation 📄   June 2024 (Virtual)
> PIC 2024, Poster Presentation 📄   Feb 2024 (Mysore, India)
> EACL 2023, Poster Presentation 📄   May 2023 (Dubrovnik, Croatia)
> ECIR 2023, Short Paper Presentation 📄   March 2023 (Virtual)
> ICON 2022, Full Paper Presentation 📄   December 2022 (IIIT-Delhi, India)
> PoliticalNLP @ LREC 2022, Poster Presentation 📄   June 2022 (Virtual)

🏆 Travel Grants and Awards

Microsoft Research Travel Grant, 2024 [🌐] : Awarded for presenting our paper at NAACL'24 held in Mexico City, Mexico.

ACM India-IARCS Travel Grant, 2024 [🌐] : Awarded for presenting our paper at NAACL'24 held in Mexico City, Mexico.

Microsoft Research Travel Grant, 2023 [🌐] : Awarded for presenting our paper at EACL'23 held in Dubrovnik, Croatia.

The INSPIRE-SHE Award, DST, 2015-2018 [🌐] : Awarded for securing a top 1% rank in Class 12th examinations.

☰ Teaching Assistant

Introduction to Machine Learning [PHD 226/ COM 4203], IACS   January - June, 2024
> Responsibilities included setting and evaluating assignments.

Laboratory - Numerical methods (PHS 4211), IACS   January - June, 2021
> Responsibilities included setting and evaluating lab assignments.

👥 Academic Responsibility

Volunteer coordinator   EACL'23 🔗

Review committee member   EMNLP'24 Industry Track 🔗, ARR - June'24 🔗, ARR - April'24 🔗, ARR - February'24 🔗, ACL'23 🔗, EMNLP'22 🔗

Program committee member   PoliticalNLP'24 🔗, EMNLP'23 Industry Track 🔗, PoliticalNLP'22 🔗

🛟 Social Responsibility

Student representative at the anti-ragging cell in IACS   2023 - Current

Research and technical assistant at Research Scholars' Association in IACS   2023-2024

System manager at Research Scholars' Association in IACS   2022-2023