

Sree Bhattacharyya

✉ sfb6038@psu.edu 🌐 sreebhattacharyya  Sree Bhattacharyya 🔗 Personal Webpage

Education

Ph.D. in Informatics

Aug 2023 – present | State College, PA

Pennsylvania State University

Advisor: Dr. James Z. Wang [✉](#); Research Areas: Affective Computing, Multimodal AI

Anticipated June 2028

Bachelor of Technology in Computer Science and Technology

2018 – 2022 | Howrah, India

Indian Institute of Engineering Science and Technology, Shibpur, India [✉](#)

CGPA: 9.86/10, University Rank: 3/600, Transcripts [✉](#)

Publications

[1] ABEE: A Large-scale Bodily Expressed Emotions Dataset

Work In Progress, preparing for IJCV (International Journal of Computer Vision)

[2] Evaluating Vision-Language Models for Emotion Recognition

Sree Bhattacharyya, James Z. Wang

Findings of The 2025 Annual Conference of The Nations of the Americas Chapter of the Association for Computational Linguistics (**NAACL 2025 Findings**)

[3] A Heterogeneous Multimodal Graph Learning Framework for Emotion Recognition in Social Networks

Sree Bhattacharyya, Shuhua Yang, James Z. Wang

12th International Conference on Affective Computing and Intelligent Interaction (**ACII**), 2024 (**Oral**)

[4] Link Prediction for Social Networks using Representation Learning and Heuristic-based Features [✉](#)

Samarth Khanna*, Sree Bhattacharyya*, Sudipto Ghosh, Kushagra Agarwal, Asit Kumar Das

9th International Workshop on Mining Actionable Insights from Social Networks (**MAISoN**) at the 32nd International Joint Conference on Artificial Intelligence (**IJCAI**), 2023.

*equal contribution

[5] Towards Bengali WordNet Enrichment using Knowledge Graph Completion Techniques [✉](#)

Sree Bhattacharyya, Abhik Jana

Proceedings of the Workshop on Resources and Technologies for Indigenous, Endangered and Lesser-resourced

Languages in Eurasia (**EURALI**) within the 13th Language Resources and Evaluation Conference (**LREC**), 2022

Poster [✉](#), Talk [✉](#)

Research Experience

Graduate Research Assistant

Aug 2023 – present | State College, PA

The Pennsylvania State University

Advisor: Dr. James Z. Wang

Selected Projects:

- **Community Data Infrastructure for Bodily Expressed Emotions (NSF CCRI) [1] (Aug 2023 - Present):**
 - Developing the crowdsourcing annotation platform to collect categorical and dimensional emotional data based on video samples.
 - Developing a novel sampling scheme for obtaining annotations balanced by emotion classes, that uses iterative crowdsourcing annotation and classification.
- **Enhancing Emotional and Subjective Reasoning Capabilities of LLMs and VLMs (May 2024 - Present):**
 - Evaluating LLMs on the most widely-used evoked emotion datasets through multimodal prompts and detailed error analysis [2]
 - Studying the use of theories from neuroscience and psychology in informing model design for emotional understanding.
 - Studying demographic biases reflected by large models in emotion-related tasks.
- **Content Memorability through Unsupervised Learning with Web-Scale Data (Jan 2025 - Present)**

- In collaboration with **Dr. Yaman K. Singla (Adobe Research [↗](#))**.
- Building a complete framework to predict recall signals and memorability scores for content, without using expensive human annotations.

Skills: Python, PyTorch, LLMs, HTML, PHP, MySQL

Undergraduate Research Assistant (Thesis)

Oct 2021 – May 2022 | Howrah, India

Indian Institute of Engineering Science and Technology, Shibpur

Advisor: Dr. Asit Kumar Das [↗](#). Work on Deep Graph Learning for diagnosis of Alzheimer's Disease Progression, and link prediction in social networks [4].

Skills: Python, Tensorflow, Ampligraph, KarateClub

Research Intern (DAAD-WISE Fellow) [5]

Feb 2021 – Sep 2021 | Hamburg, Germany

University of Hamburg

Advisor: Dr. Chris Biemann, Dr. Abhik Jana. Worked on enriching a lexical resource (WordNet) for Bengali, a low-resource Indian language, using knowledge graph completion techniques and a distributional thesaurus.

Skills: Python, Tensorflow

Software Experience

Software Engineer

Jul 2022 – Aug 2023 | Bangalore, India

Microsoft (Azure Storage)

Part of Azure Storage, working on ABFS Hadoop Driver (connector between Hadoop and Az Storage). Made regular open-source contributions in Java to the popular repository of Apache Hadoop [↗](#).

Software Engineer Intern

Jun 2021 – Jul 2021 | Remote

Microsoft (Digital Security and Risk Engineering)

Worked on Azure DevOps security scanner to develop a new incremental scan feature. The work was recognized by the Chief Information Security Officer (CISO) at Microsoft.

Student Contributor

Sep 2020 – Mar 2021 | Remote

CMS GEM Collaboration: CERN

Created a database for storing CMS experiment configurations history.

Awards and Achievements

- **Honorable Mention Award** for Poster Presentation at PSU AI Week. Chosen with 3 final year/graduating PhD students to present at the **IST Research Capstone Show** event.
- **Jordan-Rednor Graduate Fellowship (Fall 2023)**: merit-based fellowship from IST, Penn State.
- **Smt. Uma Rani Neogi Scholarship (March 2022)**: female student with the highest CGPA across the university.
- **DAAD Working Internships in Science and Engineering fellowship [↗](#) (2021)**
- **IAS-INSANA Summer Research Fellowship (Indian Academy of Sciences' SRFP 2021)**
- 4-year long science Scholarship from **Jagadish Bose National Science Talent Search (JBNSTS) Organization [↗](#)** (2018-22 batch) for undergraduate studies

Academic Services

Reviewing: ACL Rolling Reviews: Dec 2023, recognized as great review; Feb 2024, recognized as great review; June 2024, Aug 2024, Oct 2024, Dec 2024.

Extra-curricular Activities

- Project Mentor for underrepresented CS undergrad students at **AI4All**
- Section Leader at the **Stanford University Code In Place** Program (2024)
- Mentor at **IIST GDSC Women In Technology (WIT)** Chapter.
- Theatre actor in 'Sayak' (2009-15): professional theatre in India.
- Indian classical and folk music vocals: training and professional performer on television and radio.