SWATI RAJWAL



EDUCATION

Emory University, USA

CS PhD, swati.rajwal@emory.edu

Netaji Subhas University of Technology

Master of Technology (M.Tech.) Computer Science

Indira Gandhi Delhi Technical University for Women

Bachelor of Technology (B.Tech.) Computer Science & Engineering

2023 - 2028

CGPA: 3.978/4

2020 - 2022

Dept. Rank 1, Gold Medalist

2014-2018

First Class with Distinction

ACADEMIC POSITIONS

Boston Children's Hospital aff. Harvard Med. School

Comp. Health Informatics Program w/ Dr. Majumder

June - Aug 2025

Boston, USA

- * NLP for social isolation & loneliness in youth using telemental platform data from Talkspace
- * Explore patterns in polysubstance use and broader substance use trends among young population

Emory University Center for AI Learning

Research Fellow & Lead for AI.Data Lab

Jan - May 2025

Georgia, USA

- * Collaborated with project sponsors to establish foundational goals & evaluated team deliverables
- * Helped students on technical and project management skills via mini-lectures and in-person Q&A

University of Cambridge

Jan - Aug 2023

Engineering Dept., Research Assistant w/ Dr. Mancini

Cambridge, UK

- * Computationally (Python & RSTAN) processed data recorded from a 3-armed bandit algo-based task
- * Facilitated EPSRC grant application that awarded our team 1,216,800 CPU & 1,000 GPU hours

University of Oxford

Saïd Business School, Research Assistant

Aug - Dec 2022

Remote, UK

- * Research on the applications of Generative adversarial networks (GANs) in marketing & ads.
- * Implemented technical architecture for automating image processing using the StyleGAN3 model in Python.

PUBLICATIONS

- * Rajwal S et al. Understanding LLMs' Rating Behaviors on Novel Psychoactive Substances. [AMIA'25 Poster]
- * Rajwal S, Pandey A, et al. 2024. Unveiling Voices: Identification of Concerns in a Social Media Breast Cancer Cohort via NLP. In CL4Health Workshop at LREC-COLING 2024. [Paper], [Code], [NeurIPS]
- * Rajwal S, Agichtein E, Sarker A. 2024. Knowledge-Enhanced Few-Shot In-Context Learning for Medical Error Detection & Correction. In Clinical NLP workshop at NAACL'24. [Paper], [Code]
- * Romanou A.....Rajwal S. et al. Evaluating Multilingual Language Understanding w/ Knowledge [ICLR 2025]
- * Das S, Ge Y, Guo Y, **Rajwal S**, et al. 2024. Two-Layer Retrieval-Augmented Generation Framework for Low-Resource Medical Question Answering Using Reddit Data: Proof-of-Concept Study. JMIR. [Paper]
- * Rajwal S, et al. 2024. NLP & LLMs for SDOH: Protocol for Systematic Review. [Paper], [Protocol]
- * Guo Y, Rajwal S, et al. 2023. Generalizable NLP for Migraine Reporting from Social Media. [AMIA], [Code]

- * Das S, Walker D, **Rajwal S**, et al. 2024. Emerging Trends of Self-Harm Using Sodium Nitrite in an Online Suicide Community: Observational Study Using NLP Analysis. JMIR Mental Health. [Paper], [Code]
- * Rajwal S. 2023. LiHiSTO: A Comprehensive List of Hindi Stopwords. Springer. [Paper], [Code]
- * Rajwal S. 2023. Design of a Chatbot for Children Based on Emotional Intelligence. [Paper]
- * Rajwal S & Aggarwal S. 2023. CNN-Based EEG Signal Analysis: A Systematic Review. [Paper]

WORKING PAPERS

- * Rajwal S, Garg S, et al. 2025. Do Biased Models Have Biased Thoughts? [under review at COLM]
- * Zheng X, Rajwal S et al. 2024. Short-term variability of chronic musculoskeletal pain. [medRxiv], [Pyschopy]
- * Rajwal S. 2024. Decade of NLP in Chronic Pain: A Systematic Review. [arXiv]
- * Byun G, Rajwal S, Choi J.D. 2025. LLM-as-a-TA: Open-Source Grading Toolkit [under review at ACL SRW]
- * Ge, Y.,..., Rajwal S., et al. 2025. Hierarchically-Informed Data Generation for Biomedical NER. [arXiv]
- * C4AI. 2025. Kaleidoscope: In-language Exams for Massively Multilingual Vision Evaluation. [arXiv]
- * Walker D, Rajwal S, et al. 2025. Identifying Social Isolation in NVDRS Narratives. [arXiv]
- * Peddireddy S, Rajwal S, et al. 2025. Substance Use Among Homicide Suspects: Analysis of NVDRS Narratives
- * Walker D., Leung J., Alagappan A., Rajwal S. et al. Centering Patient Voices in Lupus Pain. [under review]

SCHOLARSHIPS

- * Emory LGS professional development funds awardee 2025 (Boston, 2025)
- * WiML NeurIPS Travel Fund by NSF (Canada, 2024)
- * Family Process Institute New Writers Fellowship (Denver, 2025)
- * Scholarship approved to participate in 4th Annual Stanford AI+HEALTH conference (Virtual, 2024)
- * Emory Women in Natural Sciences Fellowship for PhD (Georgia, 2023)
- * AI Education Foundation travel grant to present at Mediterranean ML Summer School (Italy, 2022)
- * Govt. of India AICTE Post Graduate scholarship (India, 2020-22)

MAGAZINE ARTICLES

- * The Art of Understanding and Connecting with Your Future Professor (2025). ACM XRDS
- * A computer scientist's role in Neuroscience (2024). Women in Neuroscience UK
- * The truth about multitasking in humans (2022). IEEE Magazine
- * The do's & don'ts of writing a research request email (2022). ACM XRDS

INDUSTRY EXPERIENCE

Eaton Corporation

Associate Software Engineer, Full Time

Pune, India 2018 - 2020

Accenture Research Lab

Innovations for Sustainability, R&D Senior Analyst Intern

Bangalore, India Feb - Aug 2022

REVIEWING ACTIVITIES

- * IEEE EMBS Int'l Conf. on Biomedical and Health Informatics (BHI) 2025
- * 13th International Conference on Learning Representations (ICLR) 2025
- * WiML workshop co-located with NeurIPS in 2024 (Canada) and 2021 (Virtually)
- * Journal of the American Medical Informatics Association (JAMIA) 2024
- * AMIA 2025 Informatics Summit and Clinical Informatics Conference
- * Co-organizer at the 9th SMM4H (ACL 2024) and 10th SMM4H (ICWSM 2025)
- * MEDIQA-CORR@ ClinicalNLP (NAACL) 2024
- * Co-reviewer: CL4Health@NAACL'25, AIME'25, IEEE BIBM'24

EXTRA-CURRICULAR

- * Jones Program in Ethics 600 Emory's Laney Graduate School Ambassador 2025
- * NSF AI Institute for Societal Decision Making Student Leadership Council (SLC)
- * Emory CSI PhD Ambassador 2024-25
- * Project lead at Cohere labs, open source community
- * Mentor at Emory University Association of Women in Science 2023-2024 Mentorship Program
- * Accepted to the 2025 Summer School in Responsible AI and Human Rights, Mila
- * Member and Mentor at Rewriting the Code since 2019
- * Published an Amazon Alexa Skill for Alexa enabled devices
- * Selected as Google's Women Techmakers Ambassador in the Cohort of 2022
- * Authored technical articles for Towards Data Science, Geek Culture, & AV Data Science Blogathon 10, 13, 15

RELEVANT COURSEWORK

- * BMI-500: Intro. to Ethical Data Science & Informatics (Profs. Gari Clifford, Matthew Reyna)
- * BMI-510: Biostatistics for ML (Prof. McKay); BMI-550: Applied Biomedical NLP (Prof. Sarker)
- * CS-557: AI; CS-572: Information Retrieval (Prof. Eugene Agichtein)
- * CS-571: NLP (Prof. Fei Liu); CS-534: ML (Prof. Joyce Ho)

TEACHING EXPERIENCES

- * CS-329: Computational Linguistics w/ Prof. Jinho Choi (Emory, Spring 2025)
- * CS-534: Machine Learning w/ Prof. Agichtein (Emory, Fall 2024)
- * CS-325: Artificial Intelligence w/ Prof. Agichtein (Emory, Spring 2024)

SESSIONS CONDUCTED

- * Hosted a session with Dr. Alpana Dubey (Sr. Tech. Researcher) to discuss R&D career
- * Text Classification: Predicting 'Good' or 'Bad' Statements using NLP at Deeplearning.ai platform
- * Demonstrated a chatbot application using Dialogflow, flask, and Python at Deeplearning.ai session
- * Customer churn prediction model in Python using Azure ML as Microsoft Learn Student Ambassador
- * Application of Reinforcement Learning in Financial Markets: build a Self-Learning Trading Agent w/ Azure
- * Getting Started with MS Azure: Hands-on for various AI APIs using Microsoft's Intelligent Kiosk platform.