

SWATI RAJWAL



EDUCATION

Emory University, USA
CS PhD, swati.rajwal@emory.edu

2023 - 2028
CGPA: 3.978/4

Netaji Subhas University of Technology
Master of Technology (M.Tech.) Computer Science

2020 - 2022
Dept. Rank 1, Gold Medalist

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
Engineering Dept., [Research Assistant](#) w/ Dr. Mancini

Jan - Aug 2023
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](#)]

PREPRINTS

- * **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](#)]
- * 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., Leung, J., Alagappan, A., **Rajwal, S.** et al. *Centering Patient Voices in Lupus Pain: A Biopsy-chosocial Analysis of Reddit Narratives Using LLM.* [under review at Arthritis Care and Research]

SCHOLARSHIPS

- * WiML NeurIPS Travel Fund by NSF (Canada, 2024)
- * Family Process Institute New Writers Fellowship (USA, 2025)
- * Scholarship approved to participate in 4th Annual Stanford [AI+HEALTH](#) conference (Virtual, 2024)
- * Emory Women in Natural Sciences Fellowship for PhD (USA, 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

- * Spearheaded R&D team to finalize lab layout for Software validation & Root cause analysis (RCA)
- * Implemented Google smart home intents to provide user control of Eaton devices via voice commands. [[App](#)]

Accenture Research Lab

Innovations for Sustainability, R&D Senior Analyst Intern

Bangalore, India

Feb - Aug 2022

- * Designed and developed a mechanism to determine and measure the frugality of a software solution
- * Frugal factors considered are affordability, simplicity, quality, sustainability, security, and accessibility

REVIEWING ACTIVITIES

- * 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

- * Emory CSI PhD [Ambassador](#) 2024-25
- * Project lead at Cohere labs, open source community [[Project](#)]
- * 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](#)
- * Amongst the [Top 25 Winners](#) at 2021 edition of Microsoft Azure Developer Stories contest

RELEVANT COURSEWORK

- * BMI-500: Intro. to Ethical Data Science & Informatics (Profs. Gari Clifford and Matthew Reyna)
- * BMI-510: Biostatistics for Machine Learning (Prof. J Lucas McKay)
- * BMI-550: Applied Biomedical Natural Language Processing (Prof. Abeed Sarker)
- * CS-557: Artificial Intelligence; CS-572: Information Retrieval (Prof. Eugene Agichtein)
- * CS-571: Natural Language Processing (Prof. Fei Liu)
- * CS-534: Machine Learning (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.