

# SWATI RAJWAL



## EDUCATION

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<b>Emory University, USA</b> CS PhD, <a href="mailto:swati.rajwal@emory.edu">swati.rajwal@emory.edu</a>	2023 - 2028 CGPA: 3.978/4
<b>Netaji Subhas University of Technology</b> Master of Technology (M.Tech.) Computer Science	2020 - 2022 Dept. Rank 1, Gold Medalist
<b>Indira Gandhi Delhi Technical University for Women</b> Bachelor of Technology (B.Tech.) Computer Science & Engineering	2014-2018 First Class with Distinction

## ACADEMIC POSITIONS

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<b>Boston Children's Hospital aff. Harvard Med. School</b> <i>Comp. Health Informatics Program w/ Dr. Majumder</i>	June - Aug 2025 Boston, USA
<ul style="list-style-type: none"><li>* NLP for social isolation &amp; loneliness in youth using telemental platform data from Talkspace</li><li>* Explore patterns in polysubstance use and broader substance use trends among young population</li></ul>	
<b>Emory University Center for AI Learning</b> <i>Research Fellow &amp; Lead for AI.Data Lab</i>	Jan - May 2025 Georgia, USA
<ul style="list-style-type: none"><li>* Collaborated with project sponsors to establish foundational goals &amp; evaluated team deliverables</li><li>* Helped students on technical and project management skills via mini-lectures and in-person Q&amp;A</li></ul>	
<b>University of Cambridge</b> <i>Engineering Dept., Research Assistant w/ Dr. Mancini</i>	Jan - Aug 2023 Cambridge, UK
<ul style="list-style-type: none"><li>* Computationally (<b>Python</b> &amp; <b>RSTAN</b>) processed data recorded from a <b>3-armed bandit algo-based task</b></li><li>* Facilitated EPSRC grant application that awarded our team 1,216,800 CPU &amp; 1,000 GPU hours</li></ul>	
<b>University of Oxford</b> <i>Saïd Business School, Research Assistant</i>	Aug - Dec 2022 Remote, UK
<ul style="list-style-type: none"><li>* Research on <b>the applications of Generative adversarial networks (GANs) in marketing &amp; ads.</b></li><li>* Implemented technical architecture for automating image processing using the StyleGAN3 model in Python.</li></ul>	

## PUBLICATIONS

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- \* **Rajwal S**, Garg S, Abdel-Salam R, Zayed A. 2025. *Do Biased Models Have Biased Thoughts?* [COLM]
- \* **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

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- \* 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

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- \* 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 4<sup>th</sup> Annual Stanford [AI+HEALTH](#) conference (Virtual, 2024)
- \* Emory Women in Natural Sciences Fellowship for PhD (Georgia, 2023)
- \* Vice Chancellor's Gold [Medalist](#) (2023)
- \* AICTE Post Graduate scholarship by Govt. of India (New Delhi, 2020-22)
- \* AI Education Foundation travel grant to [present](#) at Mediterranean ML Summer School (Italy, 2022)

## MAGAZINE ARTICLES

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- \* 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

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<b>Eaton Corporation</b>	Pune, India
<i>Associate Software Engineer, Full Time</i>	<i>2018 - 2020</i>
<b>Accenture Research Lab</b>	Bangalore, India
<i>Innovations for Sustainability, R&amp;D Senior Analyst Intern</i>	<i>Feb - Aug 2022</i>

## REVIEWING ACTIVITIES

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- \* IEEE EMBS Int'l Conf. on Biomedical and Health Informatics (BHI) 2025
- \* 13<sup>th</sup> 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 9<sup>th</sup> SMM4H ([ACL 2024](#)) and 10<sup>th</sup> SMM4H ([ICWSM 2025](#))
- \* MEDIQA-CORR@ ClinicalNLP (NAACL) 2024
- \* Co-reviewer: CL4Health@NAACL'25, AIME'25, IEEE BIBM'24

## EXTRA-CURRICULAR

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- \* 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
- \* 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

## RELEVANT COURSEWORK

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- \* 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

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- \* 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

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- \* 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.