

SWATI RAJWAL



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EDUCATION

Emory University, USA PhD, Computer Science & Informatics	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
Indira Gandhi Delhi Technical University for Women Bachelor of Technology (B.Tech.) Computer Science & Engineering	2014-2018 First Class with Distinction

ACADEMIC POSITIONS

Emory University Center for AI Learning <i>Research Fellow & Lead for AI.Data Lab</i>	USA Jan - May 2025
<ul style="list-style-type: none">* 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 <i>Engineering Dept., Research Assistant w/ Dr. Mancini</i>	UK Jan - Aug 2023
<ul style="list-style-type: none">* 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 <i>Saïd Business School, Research Assistant</i>	Remote, UK Aug - Dec 2022
<ul style="list-style-type: none">* 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**, 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](#)]
- * 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. [10.2196/66220](#).
- * **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. [Springer](#)
- * **Rajwal S**, & Aggarwal S. 2023. CNN-Based EEG Signal Analysis: A Systematic Review. [Springer](#)

PREPRINTS

- * Romanou A.,...**Rajwal, S.** et al. Evaluating Multilingual Language Understanding w/ Regional [Knowledge](#)
- * Zheng X, **Rajwal S** et al. 2024. Psychopy-based Continuous Pain Monitoring Task. [10.5281/zenodo.13754802](#)
- * Rajwal, S. (2024). Decade of NLP in Chronic Pain: A Systematic Review. arXiv preprint arXiv: [2412.15360](#)

SCHOLARSHIPS

- * WiML NeurIPS Travel Fund by NSF (Canada, 2024)
- * 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

- * 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
- * Created Angular dashboard (Node.js functions) to push Eaton's manufacturing line data to Cosmos DB.
- * Developed an [app](#) for wireless devices and implemented CRUD operations for 'routines' in smart devices.
- * Generated test plans with 350 functional & Non-functional requirements leading to successful Gate 5 GO.

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
- * Tool also recommends best practices with trade-off analysis for a frugal software solution
- * Presented the project results and demonstrated the PoC amongst the stakeholders and research team

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
- * 9th Social Media Mining for Health Research and Applications (#SMM4H) [[Overview paper](#)]
- * MEDIQA-CORR@ ClinicalNLP (NAACL) 2024

EXTRA-CURRICULAR

- * Mentor at Emory University Association of Women in Science 2023-2024 Mentorship Program
- * Member and Mentor at [Rewriting the Code](#) since 2019
- * Member of Cohere For AI Open Science Community and *Global Exam* project contributor
- * 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.