

Sagar Tamang

KATHMANDU · NEPAL

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Research Interest

AI is revolutionizing every sector today, and I am eager to contribute to its research advancements. My interests focus on Neural Machine Translation (NMT), Large Language Models (LLMs), and Machine Learning (ML), particularly in developing models that can drive innovation in language technology. I am also fascinated by the potential of AI Agents powered by LLMs, exploring their capabilities in autonomous decision-making and task execution. Through my academic journey and hands-on research experience under esteemed mentors, I have developed a deep commitment to applying my skills and knowledge in this rapidly evolving field.

Education

The Assam Kaziranga University

BCA, BACHELOR OF COMPUTER APPLICATIONS, CGPA: 9.75/10.00

• **Final Research Project**, Supervised by Dr. Dibya Jyoti Bora

Jorhat, Assam, India

2022 - 25

Army Public School Jorhat

12TH CBSE, PERCENTAGE: 89.66%

Jorhat, Assam, India

2019 - 22

Experience

National Institute of Technology Silchar (NITS)

RESEARCH INTERN

Worked under the mentorship of **Dr. Binoy Krishna Roy**; first author of the paper "Different Cybercrimes and their Solution for Common People," which analyzed cybercrime trends, Indian statistics, and proposed 31 practical solutions for non-tech-savvy individuals.

Silchar, Assam, India

Jun 2024 - Aug 2024

Success Scholar

APPLICATION/PRODUCT DEVELOPER, INTERN

Led the development of a new dynamic web application using Django-Python; upgraded the official website of the company to improve user experience and performance; developed 5+ web scrapers to extract valuable data from the Internet, enhancing data-driven decision-making.

Kolkata, West Bengal, India

Jul 2023 - Apr 2024

Publications

Evaluating Tokenizer Performance of Large Language Models Across Official Indian Languages

AVAILABLE AS A PREPRINT ON ARXIV

[HTTPS://ARXIV.ORG/ABS/2411.12240](https://arxiv.org/abs/2411.12240)

S. Tamang, D. J. Bora

Under Review

2024

AI Poramorxo: Assamese Language NLP for Medical Report Generation and Translation

AICTE ICESCC 2024 - BEST PAPER AAWARD

ISBN: 978-93-91883-98-0

S. Tamang, D. J. Bora

Oral

2024

Performance Evaluation of Tokenizers in Large Language Models for the Assamese Language

AVAILABLE AS A PREPRINT ON ARXIV

[HTTPS://ARXIV.ORG/ABS/2410.03718](https://arxiv.org/abs/2410.03718)

S. Tamang, D. J. Bora

UNDER REVIEW

2024

Different Cybercrimes and their Solution for Common People

AVAILABLE AS A PREPRINT ON ARXIV

[HTTPS://ARXIV.ORG/ABS/2410.09089](https://arxiv.org/abs/2410.09089)

S. Tamang, G. S. Chandana, B. K. Roy

UNDER REVIEW

2024

Enhancing Assamese NLP Capabilities: Introducing a Centralized Dataset Repository

AVAILABLE AS A PREPRINT ON ARXIV

[HTTPS://ARXIV.ORG/ABS/2410.11291](https://arxiv.org/abs/2410.11291)

S. Tamang, D. J. Bora

UNDER REVIEW

2024

A Comparative Study of Model Variations: English-Nepali Language Pair IEEE OTCON 2024 - BEST PAPER AWARD https://ieeexplore.ieee.org/abstract/document/10687932/ B. Nath, S. Tamang, S. Munshi, K. K. Pandey, S. Kumar, P. Randhawa	ORAL 2023
An Innovative Solution: AI-Based Digital Screen-Integrated Tables for Educational Settings AVAILABLE AS A PREPRINT ON ARXIV https://arxiv.org/abs/2410.11866 S. Tamang, D. J. Bora	UNDER REVIEW 2023

Leadership Positions Held

IEEE Student Branch - The Assam Kaziranaga University CHARIMAN Launched the IEEE Student Branch under the guidance of Mousoomi Bora . Led workshops on research for the School of Engineering & Technology (SET) and the School of Computing Sciences (SCS), fostering a culture of research and innovation on campus.	Jorhat, Assam, India Aug 2024 - now
Entrepreneurship Club - The Assam Kaziranga University VICE PRESIDENT Promoted entrepreneurial spirit on campus by organizing regular workshops, networking events, and mentorship programs, encouraging students to explore startup opportunities and innovative business ideas. Managed reports for all club events and participated in key events such as the Cambodia Delegation visit to Kaziranga University and KUDOS - the annual business plan competition.	Jorhat, Assam, India Jul 2023 - Jul 2024
Google Developers Student Clubs- The Assam Kaziranga University TECHNICAL LEAD Led the organization of multiple events such as the Smart India Hackathon, and various coding workshops, aimed at fostering and expanding the coding culture on campus. Played a key role in promoting practical coding skills and innovation among students at the university.	Jorhat, Assam, India Apr 2023 - Apr 2024

Volunteering

Institution’s Innovation Council (IIC) STUDENT MEMBER Coordinated workshops and events at the university, ensuring detailed report creation for proper documentation. Contributed to improving the university’s Innovation ranking by supporting efficient organizational processes.	Jorhat, Assam, India Mar 2023 - Mar 2024
National Service Scheme (NSS) NSS VOLUNTEER Volunteered in local villages, contributing to community service and awareness programs. Participated in National Integration Camps (NIC) and two North East NSS Festivals held at Sikkim (2024) and Meghalaya (2023). Won 2nd prize in a speech competition (2023) and 3rd prize in a debate competition (2024) during the events.	Jorhat, Assam, India Mar 2023 - Mar 2024
Safar RELATIONS EXECUTIVE, INTERN Managed relations with NGOs, specifically orphanages, to foster meaningful collaborations and impactful societal outcomes. Reached out to prospective orphanages to build partnerships for social initiatives.	Remote Jul 2023 - Sep 2023

Honors and Awards

Best Paper Award AICTE ICESCC 2024 Conference AICTE ICESCC 2024 Presented the paper "AI Poramorxo: Assamese Language NLP for Medical Report Generation and Translation," securing the best paper award.	Jorhat, Assam, India Jun 2024
Best Paper Award IEEE Conference IEEE CONFERENCE Presented the paper "A Comparative Study of Model Variations: English-Nepali Language Pair," securing the best paper presentation award.	IEEE OTCON 3.0 Jun 2024
1st Position in Extempore Speech Competition NCC CELL Organized by the NCC Cell, The Assam Kaziranga University.	NCC Cell Mar 2023
3rd Position in Model United Nation (MUN) TEAM JAPAN 20 Teams from 10 universities form across India took part in this event.	Royal Global University 2024

Projects

Therapist AI

[HTTPS://GITHUB.COM/SAGAR-TAMANG/THERAPIST-AI](https://github.com/SAGAR-TAMANG/THERAPIST-AI)

Your personal AI-powered mental health support, available 24/7.

Web App

Django, HTMX, Portykey, Daphne

BharatGPT

[HTTPS://GITHUB.COM/SAGAR-TAMANG/BHARATGPT-FEYNMANPI](https://github.com/SAGAR-TAMANG/BHARATGPT-FEYNMANPI)

India's Answer to the LLM revolution.

Web App

Django, HTMX, Google API, Postgres

SSB AI

[HTTPS://GITHUB.COM/SAGAR-TAMANG/SSB](https://github.com/SAGAR-TAMANG/SSB)

India's first AI powered Service Selection Interview Board Exam Preparation Service.

Web App

Django, HTMX, Google API, Redis

Technical Skills

Programming Python, Java, Javascript, SQL

Frameworks Django, DRF, Django Ninja, PyTorch, TensorFlow, Langchain, Selenium

Others Google Colab, Linux, Docker, Vim, IPythonNotebook, Git, Github, HTMX, Adobe Photoshop/ After Effects, Unsloth, Axolotl LLM, \LaTeX