

Sudipto Ghosh

CONTACT	<i>Phone:</i> +91-8826358310	<i>E-mail:</i> sudipto.ghosh@scai.iitd.ac.in
KEY SKILLS	LLMs, Natural Language Processing, Knowledge Graphs, Web Development, Machine Learning, Project Management, Software Engineering, System Administration, Research Work.	
EDUCATION	Indian Institute of Technology Delhi , India Ph.D. in Artificial Intelligence, July 2024 – Present University of Delhi , India M.Sc. in Computer Science, 2022 – 2024 <i>Recipient of University Gold Medal, Best Student in Sciences at University Level</i> B.Sc. (Hons.) in Computer Science, 2019 – 2022 <i>Recipient of University Gold Medal</i>	
PROFESSIONAL EXPERIENCE	Indian Institute of Technology Delhi <i>Graduate Teaching Assistant</i> July 2025 — Present Semester I 2025-26: AIL7024 Introduction to Machine Learning <i>Doctoral Researcher</i> July 2024 — Present Currently working on LLM research at the Laboratory for Computational Social Systems (LCS2) under the supervision of Dr. Tanmoy Chakraborty. Jhatkaa.org <i>Junior Software Developer</i> August 2022 — May 2023 Worked with a RoR/PHP/Node.js/Django stack, developed and maintained various legacy action tools and open-source application deployments. Managed data, cloud infrastructure across providers and DevOps pipelines. Collaborated with external vendors and upstream developers. iHub Anubhuti - IIITD Foundation <i>Project Intern</i> October 2021 — February 2022 Responsible for developing pipelines for Knowledge-based Question Answering in the legal domain under the guidance of Dr. Sarika Jain, Assistant Professor, Department of Computer Applications, National Institute of Technology Kurukshetra and Dr. Nandana Mihindukulasooriya, IBM Research, Dublin, Ireland. Major League Hacking <i>Open Source Fellow</i> June 2021 — August 2021 Worked on a JavaScript project under Jordan Harband (Member TC39, ECMA) for an npm package <i>can-merge</i> that polls the GitHub GraphQL API and allows custom scripts to run once all status checks and CI runs have completed. Participated in daily standups, pair programming, internal hackathons, CTF and code review sessions. StreetHack , Jaymant and Sons OPC Pvt. Ltd., Noida, India <i>SDE Intern</i> July 2019 — September 2019 Worked on a minimum viable product on the MERN stack. Developed RESTful APIs and a basic front-end. Employed OAuth2.0 and JWT authentication and dynamic resume generation.	
CERTIFICATIONS	IBM India Research Labs <i>Research Mentee (GRM)</i> January 2024 — June 2024 Worked on my M.Sc. major project under the IBM Global Remote Mentoring programme. Mentors: Balaji Ganesan (Senior Research Engineer, IBM Research), Prof. Vasudha Bhatnagar and Dr. Vikas Kumar (Department of Computer Science, University of Delhi). [Certificate]	

PROJECTS

- **On Natural Language Generation with LLMs** — Generated datasets using LLaMA-2 and Falcon-LM and analyzed the generations for their lexical diversity, performed topic modelling and compared topic coherence, and compared sentiment intensities in the generations.
- **Distinguishing between AI-generated and Human-written Text: A Complex Network Approach** — Modelled text as a complex network and performed network analysis to extract features and experimented with models to classify classes of text apart.
- **DUCS Voting System** — Full-stack web application for conducting elections. Built on top of the Next.js framework. Was used in production for the DUCSS Elections in October 2023.
- **AQI Monitor** — Winning Submission at the [OutSystems, Vonage, LINKIT 2020 Developer Challenge Hackathon](#). Portal for monitoring air quality information and notification service on a range of communication channels including WhatsApp, Viber, Facebook Messenger and SMS.

PUBLICATIONS

S. Ghosh, D. Verma, B. Ganesan, P. Bindal, V. Kumar, V. Bhatnagar. (August 2024). *InLegalLLaMA: Indian Legal Knowledge Enhanced Large Language Models*. Presented at the First OpenKG International Workshop, Large Knowledge-Enhanced Models at the 33rd International Joint Conference on Artificial Intelligence (IJCAI 2024), Jeju. Available: [CEUR-WS.org/Vol-3818/paper3.pdf](https://ceur-ws.org/Vol-3818/paper3.pdf).

S. Jain, P. Harde, N. Mihindukulasooriya, S. Ghosh, et al. (May 2022). *Constructing a Knowledge Graph from Indian Legal Domain Corpus*. Presented at the First International Workshop on Knowledge Graph Generation From Text (TEXT2KG 2022) co-located with the 19th Extended Semantic Web Conference (ESWC 2022), Hersonissos, Greece, in CEUR Workshop Proceedings, Vol. 3184, Aug. 2022, pp. 80-93. [Online]. Available: [CEUR-WS.org/Vol-3184/TEXT2KG_Paper.6.pdf](https://ceur-ws.org/Vol-3184/TEXT2KG_Paper.6.pdf).

ACHIEVEMENTS

Best Student (Sciences) at University M.Sc. Examinations (2024) – University of Delhi
University Gold Medal in M.Sc. Computer Science (2024) – University of Delhi
Qualified UGC-NET for Lecturership – UGC, Dept. of Higher Education, Govt. of India
University Gold Medal in B.Sc. (Hons.) Computer Science (2022) – University of Delhi
Grand Prize Winner (2020) — OutSystems, Vonage, LINKIT Developer Challenge Hackathon
INSPIRE Award MANAK (2015) — Dept. of Science and Technology, Government of India

VOLUNTEERING EXPERIENCE

Department of Computer Science, University of Delhi

Treasurer, DUCSS; Coordinator, DUCS Research Club

October 2023 — June 2024

NPTEL

Teaching Assistant

January 2023 — March 2023

Microsoft Learn

Beta Student Ambassador

July 2021 — June 2022

Enactus, Atma Ram Sanatan Dharma College, New Delhi

President

July 2021 — May 2022

Deputy Research Head

July 2020 — July 2021

Executive Member

August 2019 — July 2020

Balvantray Mehta Vidya Bhawan ASMA, New Delhi

Science Captain

April 2017 — March 2018

President, Interact Club

September 2015 — February 2016

REFERENCES

Dr. Tanmoy Chakraborty

Associate Professor, Department of Electrical Engineering (Computer Technology Group)
 Indian Institute of Technology Delhi
 Hauz Khas, New Delhi, India
tanchak@ee.iitd.ac.in

Prof. Vasudha Bhatnagar

Professor, Department of Computer Science
 Faculty of Mathematical Sciences
 University of Delhi, New Delhi, India
vbhatnagar@cs.du.ac.in