

Personal Information

Name	Suparna Das
Years of Experience	8 years
Email Id	suparna.das@bvrthyderabad.edu.in
Area of specialization	Machine Learning, Biosensors, Web Development, Cyber Security



Educational Qualifications

Doctoral Degree	Ph.D.	Woxsen University (Pursuing)
PG Degree	M.Tech.	Computer Science, BIT Mesra, Ranchi
UG Degree	B.Tech.	Computer Science and Engineering, WBUT, West Bengal

Paper Published

International Journal Publication

1. **Suparna Das**, K. R. Khondakar and H. Mazumdar, "Enhancing Large Language Models with Google Knowledge Integration for Rapid Response in Healthcare Emergencies," 2024 International Conference on Intelligent Systems and Advanced Applications (ICISAA), **IEEE Explorer**, Pune, India, 2024, pp. 1-4, doi: 10.1109/ICISAA62385.2024.10828666. (Scopus)
2. **Suparna Das**, Kamil Reza Khondakar, Hirak Mazumdar, Ajeet Kaushik, and Yogendra Kumar Mishra, "AI and IoT: Supported Sixth Generation Sensing for Water Quality Assessment to Empower Sustainable Ecosystems", **ACS ES&T Water**, 2025 5 (2), 490-510, DOI: 10.1021/acsestwater.4c00360. (ESCI, 4.9 IF, Q1)
3. Mazumdar, H., Khondakar, K. R., **Das, Suparna.**, Halder, A., & Kaushik, A. (2024). "Artificial intelligence for personalized nanomedicine; from material selection to patient outcomes." **Expert Opinion on Drug Delivery**, 22(1), 85–108. <https://doi.org/10.1080/17425247.2024.2440618>. (SCIE, 5.0 IF, Q1)
4. **Suparna Das**, Hirak Mazumdar, Kamil Reza Khondakar, Ajeet Kaushik, "Machine learning integrated graphene oxide-based diagnostics, drug delivery, analytical approaches to empower cancer diagnosis", **BMEMat** 2024, e12117. <https://doi.org/10.1002/bmm2.12117>. (ESCI)
5. Mazumdar Hirak , Khondakar Kamil Reza , **Das Suparna** , Kaushik Ajeet, "Aspects of 6th generation sensing technology: from sensing to sense", **Frontiers in Nanotechnology**, 6, 2024, ISSN=2673-3013, DOI=10.3389/fnano.2024.1434014. (ESCI, 4.1 IF, Q1)
6. **Suparna Das**, Hirak Mazumdar, Kamil Reza Khondakar, and Ajeet Kaushik, "Machine Learning Assisted Enhancement in a Two-Dimensional Material's Sensing Performance", **ACS Applied Nano Materials** 2024 7 (12), 13893-13918, DOI: 10.1021/acsanm.4c02127. (SCI, 5.3 IF, Q1)
7. **Suparna Das**, Hirak Mazumdar, Kamil Reza Khondakar, Yogendra Kumar Mishra and Ajeet Kaushik, "Review—Quantum Biosensors: Principles and Applications in Medical Diagnostics", **ECS Sensors Plus**, 2024 3 025001, DOI 10.1149/2754-2726/ad47e2. (Scopus)

8. Hirak Mazumdar, **Suparna Das**, Sathvik MSVPJ, et al. “*CliniXPrompt: Enhancing the Comprehensibility of Electronic Health Records using GPT-3 and Chain of Thought.*” Advance. April 28, 2024. DOI: 10.22541/au.171429080.04246842/v1.
9. S. S. M, **Suparna Das** and H. Mazumdar, "Predictive Accuracy Analysis for Corona Virus Using Residual U-Net in Radiological Data," 2024 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI), Gwalior, India, 2024, pp. 1-6, doi: 10.1109/IATMSI60426.2024.10503374. (Scopus)
10. Shanmuga Sundari, M., Samyuktha, P., Kranthi, A., **Das, Suparna**. (2022). “Evaluating Performance on Covid-19 Tweet Sentiment Analysis Outbreak Using Support Vector Machine.” In: Bhateja, V., Satapathy, S.C., Travieso-Gonzalez, C.M., Adilakshmi, T. (eds) Smart Intelligent Computing and Applications, Volume 1. Smart Innovation, Systems and Technologies, vol 282. Springer, Singapore. https://doi.org/10.1007/978-981-16-9669-5_14. (Scopus, Q4)

Book chapter

1. **Suparna Das** and H. Mazumdar, “Chapter 9: Integration of Artificial Intelligence and Computational Thinking in Lab-on-a-chip Technology for Quality Improvement in Healthcare” in Lab-on-a-chip Devices for Advanced Biomedicines: Laboratory Scale Engineering to Clinical Ecosystem, ed. A. Parihar and P. Pradeep Mehta, **Royal Society of Chemistry, 2024, vol. 25, ch. 9, pp. 272-309.** <https://doi.org/10.1039/9781837673476-00272>

Patent

1. Application No : 202541012330 A – “Edge-Aware Geospatial Image Analytics System for Precise Land Use Classification” Published on 21/02/2025.
2. Application No : 202541010761 A – “Integrated System for Neuro Disease Diagnosis and Management Using Large Language Models and Advanced Image Processing” Published on 14/02/2025.
3. Application No : 202341066332 A– “A System and Apparatus for Advanced Enhanced Neural Style Transfer (NST) Method Leveraging Resnet Architecture for High-Fidelity Image Synthesis.” Published on 20/10/2023.
4. Design number: 6288320, Grant date: 21 August 2023, “Spillproof, Portable Medi Strip”.
5. Design number: 388783-001, Grant date: 21 June 2023, “HEXAGONAL PILL”.

FDP's Attended

1. Five day Faculty Development Program on “Building Web Development Solutions with cloud Computing” under the Next Gen Employability Program at GRIET from 20/01/2025 to 24/01/2025.
2. AICTE Training and Learning (ATAL) Academy Faculty Development Program on “Wearable Devices-AI for Digital health” at VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING & TECHNOLOGY from 06/01/2025 to 11/01/2025.
3. AICTE Training and Learning (ATAL) Academy Faculty Development Program on “Emerging Trends in Wearable Device and The Future of Healthcare” at SNS COLLEGE

OF TECHNOLOGY from 09/12/2024 to 14/12/2024.

4. One-week International Professional Development Program on “Smart Mobility: The Future of Autonomous Electric Vehicles” at BVRIT HYDERABAD College of Engineering for Women from 11/11/2024 to 16/11/2024.
5. AICTE Training and Learning (ATAL) Academy Faculty Development Program on “Generative AI with Large Language Models and its Applications” at VASAVI COLLEGE OF ENGINEERING from 09/09/2024 to 14/09/2024.
6. One Week National Level Online Faculty Development Program on “Role of Bigdata and Cloud in the Era of Transformation” organized by Department of Computer Science & Engineering (CSE) of GATES Institute of Technology, 29th Jan 2024 to 3rd Feb 2024.
7. One Week National Level Online Faculty Development Program on “Generative AI: Transforming Education and Research” organized by Dept. of IT, BVRIT HYDERABAD College of Engineering for Women, Hyderabad, from 8th Jan 2024 to 13th Jan 2024.
8. One Week National Level Online Faculty Development Program on “Artificial Intelligence for Agriculture Innovation (AI4AI)” organized by Dept. of CSE (AIML), BVRIT HYDERABAD College of Engineering for Women, Hyderabad, from 11th December 2023 to 16th Dec 2023.
9. One Week National Level Online Faculty Development Program on “Recent trends in Artificial Intelligence and Machine Learning for Smart Computing” organized by Dept. of CAS, Institute of Engineering & Management, Kolkata, Technically Sponsored by : CSI, Kolkata Chapter, from 9th Oct 2023 to 13th Oct 2023.
10. One Week FDP on “Machine Learning in Big Data Applications and Security Challenges” organized by MLRIT, Department of Computer Science and Engineering, from 24th Apr to 29th Apr 2023.
11. One Week FDP on “Amazon Web Services” organized by Lendi Institute of Engineering & Technology in Collaboration with Brainovision Solutions India Pvt Ltd., & All India Council for Technical Education (AICTE) from 22nd Aug 2022 to 27th Aug 2022.
12. One Week FDP on “Machine Learning Fundamentals” organized by Department of CSE, BVRIT HYDERABAD College of Engineering for Women, from 30th Aug 2021 to 04th Sep 2021.
13. One Week National Level Online Faculty Development Program on Multi Technology from 28th June to 3rd July 2021 organized by Department of CSE & IT, BVRIT HYDERABAD College of Engineering for Women in association with NYCI & Brainovision Solutions India Pvt. Ltd.
14. National Level 5-day online Faculty Development Program on “Research and Application Perspectives in Artificial Intelligence and Machine Learning” organized by Department of Computer Science and Engineering, Sridevi Womens Engineering College from 21st to 25th June 2021.
15. 15 days FDP on “Cyber Security” organized by JNTUH from 24th Aug to 9th Sept 2020.
16. International Level One Week FDP on “Advanced Data Science and its Applications” organized by BVRIT HYDERABAD College of Engineering for Women from 22nd to 26th June 2020.
17. 2 days FDP on “Significance of Online Learning Tools Post COVID-19” organized by Andhra Loyola College on 12th and 13th June 2020 associated with Codegnan IT Solutions (OPC) Pvt. Ltd..
18. 5 days FDP on “Research Trends in Image Processing” from 15th -19th June 2020 organized by Gates Institute of Technology.
19. 6 days FDP on “PHP & MySQL” from 18th May to 23rd May 2020 organized by JNTUH

Jagtrial associated with Spoken Tutorial IIT Bombay.

20. 5 days FDP workshop on “Avenues for Technology & Research in IoT” from 11th – 16th December 2017, held at MGIT, Gandipet Hyderabad.

Certification:

1. “Introduction to Cloud Computing” in SimpliLearn|SkillUp, 9th Jan 2025.
2. “Introduction to Industry 4.0 and Industrial Internet of Things” in NPTEL, Nov 2024.
3. “Unity and C# basics” in Coursera, 16th Apr 2024.
4. “Research Methodology” in NPTEL, 29th Oct 2023.
5. “Introduction to Internet of Things” in NPTEL, 29th Oct 2023.
6. “Cloud Computing Basics (Cloud 101)” in Coursera, 3rd Aug 2023.
7. “Introduction to Agile Development and Scrum” in Coursera, 17th Jun 2023.
8. “Introduction to DevOps” in Coursera, 16th Jun 2023.
9. “Learn AWS by Doing” in A Cloud Guru, 8th Aug 2022.
10. “DevOps Foundations: Distributed Tracing” in LinkedIn Learning, 30th July 2022.
11. “Test Automation Foundations” and “DevOps Foundations: Monitoring and Observability” in LinkedIn Learning, 28th July 2022.
12. “DevOps Foundation Continuous Delivery/Continuous Integration” in LinkedIn Learning, 26th July 2022.
13. “DevOps Foundation” in LinkedIn Learning, 25th July 2022.
14. “Learn Kubernetes by doing” in A Cloud Guru 21st July 2022
15. “Helm Deep Dive V2” and “Service Mesh with Istio” in A Cloud Guru 19th July 2022.
16. “Kubernetes Essentials” in A Cloud Guru 18th July 2022.
17. “Docker certified Associate (DCA)” in A Cloud Guru 15th July 2022.
18. “Red Hat Certified Specialist in Ansible Automation (EX407) Preparation” in A Cloud Guru 2nd July 2022.
19. “Using Terraform to Manage Applications and Infrastructure” in A Cloud Guru 2nd July 2022.
20. “HashiCorp Certified Terraform Associate” in A Cloud Guru 29th June 2022.
21. “AWS Certified SysOps Administrator - Associate” in A Cloud Guru 18th June 2022.
22. “AWS Certified Cloud Practitioner (CLF-C01)” in A Cloud Guru 8th June 2022.
23. “Introduction to Cloud Computing” in A Cloud Guru 6th June 2022.
24. “The System Administrator’s Guide to Bash Scripting - NEW 2020” in A Cloud Guru 2nd June 2022.
25. “Learning Bash Scripting” on LinkedIn 31st May 2022.
26. “Red Hat Certified System Administrator (EX200) - RHCSA Exam Prep” in A Cloud Guru 30th May 2022.
27. “Learning NGINX” on LinkedIn 24th May 2022.
28. “Linux System Engineer: Web Servers and DNS Using Apache, NGINX, and BIND” and “NoSQL Essential Training” on LinkedIn 23rd May 2022.
29. “MTA Database Fundamentals (98-364) Cert Prep: 1 Core Concepts” and “PostgreSQL Administration Deep Dive” in LinkedIn Learning 22 May 2022.
30. “Introduction to SAN and NAS Storage” in LinkedIn Learning 21st May 2022.
31. “Network Routing Fundamentals” and “Subnetting Fundamentals” in A Cloud Guru 19th May 2022.
32. “Responsive Website Basics: Code with HTML, CSS, and JavaScript” in Coursera on 24th May 2020.
33. “Python Basics” in Coursera on 17th May 2020.
34. “Introduction to Web Development” in Coursera on 17th May 2020
35. “Introduction to HTML5” in Coursera on 17th May 2020
36. “AI for Everyone” in Coursera on 16th May 2020
37. “Introduction to Data Science in Python” in Coursera on 25th April 2020.
38. “Programming for Everybody (Getting Started with Python)” in Coursera on 19th April 2020.

Workshops

1. One day workshop on “Intellectual Property Rights and Patent Drafting” organized by Woxsen University on 26th Apr 2023.
2. One day workshop on "Shaping the Future of Technology using Artificial Intelligence and Machine Learning on Smartening Our World: The Role of AI and Machine Learning in Shaping Tomorrow's Technology" organized by School of Technology (SOT), Woxsen University, India on 10th Apr 2023.
3. One day workshop on “Linux” on 23rd August 2019, held at GRIET, Kukatpally, Hyderabad organized by IIT Bombay.
4. Two weeks Workshop on “Online Bootcamp on Web Development” organized by SVES in May 2020.
5. One day workshop on “AngularJS to develop Web App faster” associated with NYCI and Brain-o-vision Solutions India Pvt. Ltd organized by Sridevi Engineering College held on 26th June 2020.

Webinars

1. Webinar on “AI & Data Science for Innovation” conducted by Research and Development Cell, BVRIT HYDERABAD College of Engineering for Women, HYDERABAD, on 22 Oct 2021.
2. Webinar on “Evaluation of Diabetic Problems using ML” conducted by Research and Development Cell, BVRIT HYDERABAD College of Engineering for Women, Hyderabad & IEEE SB UDBHAVA, on 01th Oct 2021.
3. Webinar on “Current Research Trends in Elliptic Curve Cryptography” conducted by Departments of CSE / CSE (AI & ML) / IT, BVRIT HYDERABAD College of Engineering for Women on 25th Sep 2021.
4. Webinar on “Research Opportunities of Deep Learning in Bioinformatics” conducted by Departments of CSE / CSE (AI & ML) / IT and TechBlitz in association with IIC, BVRIT HYDERABAD College of Engineering for Women on 27th Aug 2021.
5. Webinar on “Modern Convolutional Neural Networks” conducted by Research and Development Cell, BVRIT HYDERABAD College of Engineering for Women, Hyderabad on 07th Aug 2021.
6. Webinar on “COVID-19-Problems and Challenges of Women”, conducted by G. Narayanamma Institute of Technology and Science, Hyderabad in association with CIIWN on 27th June 2020.
7. Webinar on “Intellectual property and innovation management” organized by BVRITH on 15th June 2020.
8. Webinar on “NoSql Database - Choosing the RightDB ” organized by BVRITN on 13th June 2020.
9. Webinar on “Digital Image Processing” organized by Vignan Institute of Management and Technology Women on 8th June 2020.
10. Webinar on “New Paradigms in Teaching Coding” organized by Team FACE Prep on 3rd June 2020.
11. Webinar on “Doctoral Thesis: Key Components and Research Skills” and “Research Funding Opportunities: In India and Abroad” organized by IQAC & Research Cell on 14th May 2020.

Quiz

1. One week quiz on “The art of questioning on revised Bloom's Taxonomy” organized by BVRIT from 24th June to 30th June 2020.
2. 2 days Quiz on “Python Basics” organized by BVRIT HYDERABAD on 15th & 16th June 2020.
3. Quiz on “Deep Learning” organized by Raghu Institute of Technology, Visakhapatnam on 2nd June 2020.
4. Quiz on “Digital System Design with ASM Charts” organized on Holly Mary Institute of

Technology & Science on 30th May 2020.

5. Quiz on “Teaching Methods and Strategies” organized by MLRIT, Hyderabad on 29th May 2020.
6. Quiz on “Fundamentals of Computer Networks” organized by Holly Mary Institute of Technology & Science on 29th May 2020.

Other Certifications

1. An awareness program on “Start-ups Funding Opportunities”: Angle, Venture Capital, Grants & Schemes on July, 19th, 2024 organized by the Directorate of Entrepreneurship Innovation and Start-ups (DEIS), JNTUH, Hyderabad (Offline).
2. PHP certification organized by IEEE in 2012.
3. Trainee at EPAM Systems India Private Limited from Center of Excellence (COE) and Memorandum of Understanding (MoU). (Faculty Trained by Industry) – “DevOps” from 16th May 2022 to 12th Aug 2022

Memberships

1. ACM