

Name of Teaching Staff	:	Mr. Ajay Ramrao Sirsat	
Designation	:	Assistant Professor and Incharge H.O.D.	
Department	:	Artificial Intelligence and Machine Learning	
Date of Joining the Institution	:	16/06/2016	
Email ID	:	ajays@sjcem.edu.in	
Office Contact	:	8928188845	
Qualifications With Class/Grade		(Ph.D. (Pursuing at National Institute of Technology, Warangal, Telangana, India (NITW)), M.E., B.E. Comp. Engg.)	
Total Experience in years		Teaching -11 Years and Industry-2 Years	
Area of Specialization		Software Testing and Program Analysis	
Google Scholar Link	:	https://scholar.google.com/citations?user=pNIFkkgAAAAJ&hl=en	
Vidhwaan Portal ID		https://vidwan.inflibnet.ac.in/v2/dashboard	
ORCID		https://orcid.org/my-orcid?orcid=0009-0008-5993-4250	
Papers Published in Journal:	:	1. A. R. Sirsat, et al., “HMGL-DBiLSTM: Optimization driven meta gradient learning based distributed BiLSTM model for intrusion detection in IoT network,” <i>Progress in Engineering Science</i>, vol. 3, no. 2, Art. no. 100303, 2026, doi: 10.1016/j.pes.2026.100303. 2. A. R. Sirsat, et al., “Learnova: Host and Monetize Educational Content,” <i>International Research Journal on Advanced Engineering Hub (IRJAEH)</i>, vol. 4, no. 3, pp. 1003–1010, Mar. 2026, doi: 10.47392/IRJAEH.2026.0142. 3. A. Sirsat, et al., “Secured and Advanced Image Steganography for Mobile Multimedia Security,” in <i>Proc. IEEE Int. Conf. on Computer, Communication and Informatics (ICCMC)</i>, 2025, pp. 584–590, doi: 10.1109/ICCMC65190.2025.11140696. 4. A. Sirsat, et al., “Conversational Chatbot with RASA for Educational Facilitation,” in <i>Proc. 6th Int. Conf. on Mobile Computing and Sustainable Informatics (ICMCSI)</i>, 2025, pp. 267–272, doi: 10.1109/ICMCSI64620.2025.10883243. 5. A. Sirsat, et al., “Bug Testing Automation with Playwright and a Backend API,” in <i>Proc. 8th Int. Conf. on I-SMAC</i>, 2024, pp. 1867–1870. 6. A. Sirsat, et al., “Deep Learning based Tree Detection and Health	

	Assessment from Satellite Imagery: An Integrated Approach to Urban Forest Monitoring,” in <i>Proc. International Conference</i>, 2024. 7. A. Sirsat and P. Padiya, “Dead End Free Topology Maintenance Protocol for Sinktrail,” in <i>Proc. IRF International Conference</i>, Bengaluru, India, 2015, pp. 96–99, ISBN: 978-93-85832-43-7. 8. • A. R. Sirsat, et al., “Comparative Study of DDoS Attack Detection Technique in Cloud Computing Environment,” <i>International Journal of Science and Research (IJSR)</i>, vol. 3, no. 12, Dec. 2014.
Papers Presented in Conferences	• A. Sirsat, et al., “Secured and Advanced Image Steganography for Mobile Multimedia Security,” presented at the <i>IEEE International Conference on Computer, Communication and Informatics (ICCMC)</i>, 2025, pp. 584–590. • A. Sirsat, et al., “Conversational Chatbot with RASA for Educational Facilitation,” presented at the <i>6th International Conference on Mobile Computing and Sustainable Informatics (ICMCSI)</i>, 2025, pp. 267–272. • A. Sirsat, et al., “Bug Testing Automation with Playwright and a Backend API,” presented at the <i>8th International Conference on I-SMAC</i>, 2024, pp. 1867–1870. • A. Sirsat, et al., “Deep Learning based Tree Detection and Health Assessment from Satellite Imagery: An Integrated Approach to Urban Forest Monitoring,” presented at an <i>International Conference</i>, 2024. A. Sirsat and P. Padiya, “Dead End Free Topology Maintenance Protocol for Sinktrail,” presented at the <i>IRF International Conference</i>, Bengaluru, India, 2015, pp. 96–99.
Books Published/IPR/Patents	Published an international book titled “Cybersecurity and Digital Forensic” in 2025 through Scientific International Publication House. Contributed to Intellectual Property Rights through multiple patents, including “AI Based Chemical Mixing Device for Agriculture” (Indian Design Patent, Application No. 446483-001), “Device to Identify Active Constituents from Medicinal Plants” (Indian Design Patent, Application No. 439817-001), “Interactive Doctor Simulation Computer Device for Kids’ Learning and Role Play” (UK Design Patent, Application No. 6467268), and “Tree Enumeration Device using Deep Learning and Satellite Imagery” (Indian Design Patent). Obtained copyrights for “Search Light – Helper for Society” (2025), “Student Mental Health Wellness Hub” (2025), “3D Space Calculator” (2024), and “Hand

	Easy” (2024).
Professional Memberships with ID	Lifetime Member, Indian Society for Technical Education (ISTE) – Membership ID: LM116769.
Grants Fetched	Successfully received the following research and institutional grants: BIS Standard Club Grant – ₹50,000, MSME – Career Ride Grant – ₹30,000, Minor Research Proposal Grant from the University of Mumbai – ₹15,000, and Seed Money Research Proposal Grant from St. John College of Engineering and Management – ₹20,000. Received an Appreciation Letter from the University of Mumbai for the development of the NSS Mobile App.
Technical/NPTEL certifications	• AI & Machine Learning: "AI in Practice: Complete Stack from Data to Gen AI" (2025), "NLP Trends and Applications" (NIT Warangal, 2024–2025), and "Machine Learning-Basics to Advanced" (2022). • Blockchain & Security: "Smart Contract and Blockchain Technologies" (NIT Warangal, 2023), "Blockchain Technology & Cryptocurrency" (2021), and "Cloud Computing and Security" (2018). • Data Science & Analytics: FDP on Data Science (2023) and "Analytics Essentials and Tools in Applied Research" (2017). • IoT & Cloud: "Building Realtime Data Processing IoT Applications Using Amazon Web Services". • Software Testing & Development: "Recent Trends in Software Testing" (NIT Warangal, 2022), Linux Workshop, LaTeX Workshop, and Qualnet Workshop.

Board of Studies member, BoE under any State/ Central University	• University-Level Projects & Grants: Received a Minor Research Proposal grant from the University of Mumbai and an Appreciation Letter from the University of Mumbai for developing an NSS Mobile App. • Academic & Syllabus Orientation: Participated in the Faculty Orientation Program for Social Media Analytics & Lab (BE Computer Engineering, Semester VIII) under the University of Mumbai curriculum. • Institutional Administrative Roles: Served as Deputy-HOD, NIRF Coordinator, NAAC Criteria Coordinator (Criteria 5 & 7), NBA Criteria Coordinator (Criteria 4 & 7), Internship Coordinator, and EDC Departmental Coordinator. • Professional Membership: Holds lifetime membership in the Indian Society for Technical Education (ISTE - LM116769).
Institute/Department Responsibility handled:	Administrative & Department Leadership • Deputy Head of Department (Deputy-HOD) • Departmental Coordinator: CREPT Coordinator, Internship Coordinator, Industrial Visit Coordinator, and Entrepreneurship Development Cell (EDC) Coordinator • Student Mentorship: Served as Class Advisor, Mentor, and Project Guide Accreditation & Institutional Ranking Portfolios • NIRF Coordinator • NAAC Criteria In-Charge: Criteria 5 (Student Progression & Support) and Criteria 7 (Innovation & Best Practices) • NBA Criteria In-Charge: Criteria 4 (Students Performance Technical Event Coordinator) and Criteria 7 (Continuous Improvement) Committees & Student Development Activities • SC/ST Committee In-Charge • Event & Sponsorship Coordination: IC-TEAM Sponsorship Coordinator and Technical Event Coordinator • Out-House Project & MoU Facilitation: Coordinated industry-sponsored projects with companies such as Quass Tech Pvt. Ltd. and

		Shubhchintak Technology Pvt. Ltd., alongside driving corporate MoUs for student internships and placements • Industrial Visit Supervision: Organized and led technical industrial visits for engineering students (including visits to ISRO Bengaluru, VOLVO Mysore, Wipro Ltd. Mysore, and Vervali Systems)	
M.E./M.Tech/? Give field & University	:	<u>Field:</u> <u>University:</u>	Cryptography and Cyber security (Computer Engineering) University of Mumbai

PhDs/Projects Guided	:	<u>PhDs:</u> <u>Projects</u> <u> at</u> <u>Masters level:</u>	NIL
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Interaction with Professional Institutions	:	Guest Lectures: 3 Other Achievements and Responsibilities:	Government & Apex Bodies • Bureau of Indian Standards (BIS): In-charge of the BIS Standard Club, securing a ₹50,000 grant and hosting standard awareness activities on emerging AI/ML trends. • MSME (Ministry of Micro, Small & Medium Enterprises): Received a ₹30,000 grant under the MSME-Career Ride initiative. • Ministry of Electronics and Information Technology (MeitY): Completed a national-level FDP on "NLP Trends and Applications" sponsored by MeitY. Premier Academic Institutions • NIT Warangal: Engaged through research presentation at the 7th Software Engineering Research in India (SERI 2025) update meeting and completed specialized FDPs on Blockchain Technologies and Software Testing. • NITTTR Chandigarh: Participated in a national short-term training program on Climate Resilient Pathways for Sustainable Development. • University of Mumbai: Awarded an official Appreciation Letter for developing the University's NSS Mobile App and received a Minor Research Proposal grant. Technical Societies & Conference Organizations • IEEE: Published multiple peer-reviewed research papers in IEEE international conferences including ICMCSI, I-SMAC, and ICPCSN. • TPO & Placement Associations: Engaged with regional placement networks through the Capable National TPO Conclave and IBS TPO Meets. • ISRO & Industry Leaders: Facilitated institutional
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		interaction with major bodies by organizing student industrial visits to ISRO (Bengaluru), Wipro, VOLVO, and local software firms. • Social Media Analytics & Social Media Analytics Lab: Attended the official University of Mumbai Faculty Orientation Program for this subject (BE Computer Engineering, Semester VIII). • Software Engineering: Delivered an expert talk on this subject at S. Kant Pvt. Ltd. • Software Testing & Quality Assurance: Extensively covered through research publications, FDPs ("Recent Trends in Software Testing"), and expert session coordination. • Artificial Intelligence & Machine Learning: Primary domain for guided student projects, research publications, and specialized workshops. • Internet of Things (IoT) & Cloud Security: Reflected across research publications and STTP participation
Subjects Taught		Software Engineering, Mobile Communication, Mobile Communication and Computing. Distributed Computing, Big Data Analytics, Social Media Analytics, Foundation of Artificial Intelligence and Machine Learning, Soft Computing, Software Engineering and Project Management, Cyber Security, Digital Forensics, Database Management System.