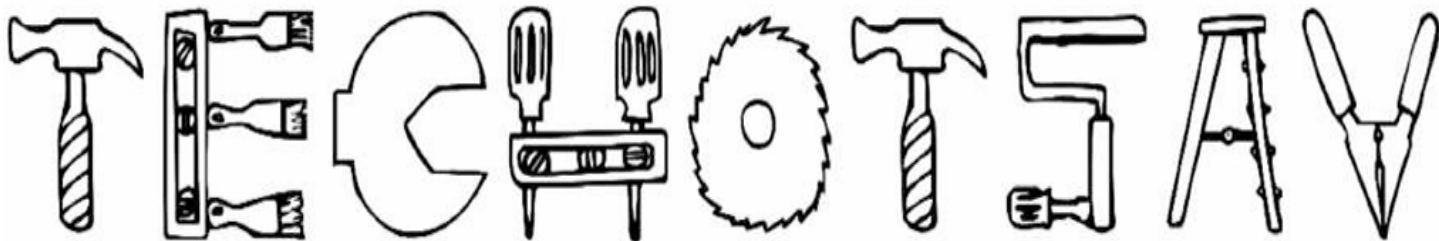




Department of Artificial Intelligence & Data Science



**The Newsletter
June 2026 Edition**



The Newsletter

Jan 2026 - Jun 2026

"Educate and raise the masses, and thus alone a nation is possible" -Swami Vivekananda



VISION

To be a place of academic excellence by imparting quality teaching in the field of **Artificial Intelligence**.



MISSION

To render quality teaching and provide the required resources needed to acquire cutting edge professional skills.

To encourage innovation through academic and industry exposure.

To foster ethical behaviour, team work skills and soft skills required for a successful professional life.

NEWSLETTER COMMITTEE

Student team

**Molisha Jain, Insiyah Bhatia, Shubham Vishwakarma,
Farheen Raazi, Khadija Rampurwala, Divesh Sutar**



Message from Head of Department

ARTIFICIAL INTELLIGENCE & DATA SCIENCE

Dear Techotsav Community,

We are delighted to bring you the latest edition of the "TECHOTSAV" Newsletter of Department of AI-DS for the period Jan - June 2026, your go - to source for all things technology and innovation. As the world continues to evolve at an unprecedented pace, it is essential to stay informed and up-to-date with the latest advancements in the tech industry.

It gives me immense pleasure to share the achievements and progress of the Department of AI-DS since its inception. I express my sincere gratitude to our Principal, Dr. Vivek Sunnapwar for his constant encouragement, support, and motivation to our faculty, staff, and students. We began our journey in 2020-21 with an intake of 60 students, which has grown to 120 in 2023-24, reflecting the increasing trust and interest in the AI-DS domain.

Our department has a vibrant team of committed faculty members and enthusiastic students who stand out across the institute. I am delighted to share that I have registered for a Post-Doctoral Research Program at Lincoln University College, Kuala Lumpur, Malaysia. Dr. Sheetal Jagtap recently completed her Ph.D., and four of our faculty members are currently pursuing their doctoral research from reputed universities. The department proudly received a grant from AICTE-ATAL Academy to organize a Faculty Development Program for 2025-26. Faculty and students have contributed significantly through quality peer-reviewed publications and innovative projects. I congratulate the Techotsav newsletter committee for their dedicated efforts in presenting our department's vibrant activities and achievements. Let us continue our journey with passion, purpose, and innovation.

Best regards,

Dr. Milind Nemade,
Head and Professor AI-DS
KJSIT Sion, Mumbai.



Dr. Milind Nemade
Head of Department
(AI-DS)



Newsletter Incharge Message

ARTIFICIAL INTELLIGENCE & DATA SCIENCE

Dear Students,

The field of Artificial Intelligence and Data Science continues to evolve at an incredible pace. This month, global tech leaders introduced advanced real-time video-generating and multimodal AI systems, marking a significant step toward human-like machine reasoning. Nationally, the Government of India's new AI mission focuses on applying AI solutions in agriculture, healthcare, and education—opening exciting pathways for young engineers to make meaningful contributions.

As students of AI & DS Engineering, I encourage you to stay curious, build hands-on experience, and take part in research, hackathons, and industry projects. These experiences will help you grow both as learners and innovators in this transformative era.

The newsletter serves to keep AI & Data Science Engineering students well-informed and actively engaged with the latest trends, innovations, and developments in the field. It serves as a platform to share recent technological advancements, departmental updates, research highlights, student achievements, and upcoming opportunities such as internships, workshops, and competitions. By connecting academic learning with real-world innovation, the newsletter strives to inspire curiosity, encourage active participation, and build a vibrant community of future-ready AI & DS professionals.

A heartfelt thank you to our dedicated editorial and content team for their continued effort in curating this newsletter. Your creativity, coordination, and commitment help keep our student community informed and inspired.

Warm regards,
Dr. Sheetal Jagtap
Newsletter Incharge
Department of AI & DS Engineering, KJSIT, Mumbai.



Prof. Sheetal Jagtap
Newsletter Incharge
(AI-DS)



CII Project Exhibition Visit – AI-Robo Festival 2026 – Educational Visit to Nehru Science Centre Organized by AI-DS

The Department of Artificial Intelligence & Data Science, in collaboration with the Departments of Electronics & Telecommunication and Computer Engineering, organized an educational visit to the CII Project Exhibition at the Nehru Science Centre, Worli, Mumbai, on 6th February 2026. The visit was conducted for Second Year students under the guidance of faculty members Prof. Pankaj Deshmukh, Prof. Chitra Bhole, Prof. Martand Jha, Prof. Pradnya Jadhav, and Prof. Preshant Upadhyay. The exhibition showcased 92 innovative projects across domains such as Artificial Intelligence, Data Science, IoT, Robotics, Automation, Renewable Energy, and Smart Technologies. Students interacted with exhibitors, gaining insights into real-world problem-solving and implementation techniques. The visit enhanced their understanding of industry-relevant technologies, encouraged innovative ideas for Project-Based Learning (PBL), and helped bridge the gap between theoretical knowledge and practical applications.



Fig: Students Exploring Innovation at CII Project Exhibition, Nehru Science Centre

The Department of Artificial Intelligence & Data Science successfully organized the Somaiya AI-Robo Festival 2026 under the guidance of Dr. Vaishali Wadhe, showcasing innovation and technical excellence among students. The festival featured competitions including AI Project Exhibition, Ideation Competition, and IoT Project Competition, along with poster presentations, providing students with a platform to present innovative ideas and working solutions.



Fig: AI-DS Students Honoured During Prize Distribution Ceremony at Somaiya AI-Robo Festival 2026

AI-DS students actively participated and presented a range of innovative projects across all categories, reflecting strong technical knowledge, creativity, and problem-solving skills in emerging domains. The event was successfully organized with enthusiastic student participation and continuous support from faculty members, providing a platform to showcase innovative ideas while fostering a spirit of innovation and collaboration.



Exploring SAP: An Introduction to Integrated Business Processes

The Department of Artificial Intelligence & Data Science organized a Guest Lecture on "SAP Introduction and Integrated Business Processes" for Third Year and Last Year students on 11th April 2026.

The session was delivered by Mrs. Snehal Kale, Senior Consultant at Infosys Limited, Pune, who provided valuable insights into SAP systems and their significance in modern business environments. She also highlighted how integrated business processes enhance organizational efficiency and decision-making.

The lecture was coordinated by Dr. Sheetal Jagtap and Prof. Deepali Chavan, ensuring active participation and engagement from students. The session proved to be highly informative, offering students industry-relevant knowledge and exposure to enterprise-level technologies.

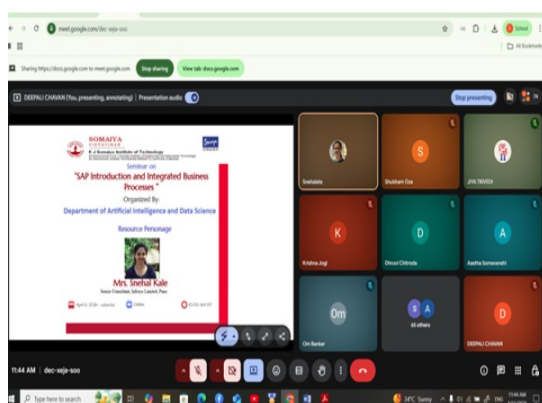


Fig: Guest Lecture on SAP and Business Processes for AI-DS Students

Idea to Patent Workshop: Understanding the Patent Filing Process

The Department of Artificial Intelligence & Data Science, in association with the S4DS student body, organized a workshop on "Idea to Patent" on 27th February 2026 at the KJSIT Auditorium.



Fig: Mr. Anand Mahurkar from AM Legal Associates, Pune

The session was conducted by Mr. Anand Mahurkar and his team from AM Legal Associates, Pune, who provided valuable insights into the process of transforming innovative ideas into legally protected patents. The workshop covered key aspects such as understanding intellectual property rights (IPR), steps involved in patent filing, documentation procedures, and real-world case studies.

Students gained a clear understanding of how to safeguard their innovations and were encouraged to actively pursue research, entrepreneurship, and technology development. The session also offered continued support for students interested in taking their ideas forward toward actual patent implementation.

The workshop proved to be highly informative and inspiring, fostering a culture of innovation, creativity, and problem-solving among students.



Fig: Students Engaging in 'Idea to Patent' Workshop at KJSIT Auditorium

INITIATIVES

KnowCode 3.0 – Where Ideas Evolved into Scalable Solutions

The Department of Artificial Intelligence & Data Science, in collaboration with the Society for Data Science (S4DS), successfully organized KnowCode 3.0, a flagship 36-hour on-campus hackathon, from 24th to 26th January 2026 at K. J. Somaiya Institute of Technology, Sion. The hackathon focused on Software as a Service (SaaS)-based innovation, where participants were challenged to ideate, develop, and deploy scalable, real-world solutions using modern technologies. Teams worked intensively on cloud-ready platforms addressing practical business and consumer needs, with emphasis on performance, scalability, security, and usability.

A total of 30 teams participated in the event, collaborating and competing over 36 hours under the guidance of experienced mentors and industry experts. The event was evaluated by a distinguished panel including Mr. Pranav Paranjpe, Mr. Malcolm Gonsalves, Mr. Devesh Rajadhyaksh, and Ms. Mariam Dholkawala, who provided valuable feedback and insights.

KnowCode 3.0 served as a dynamic platform for innovation and experiential learning, enabling students to develop real-world prototypes, enhance their technical skills, and foster entrepreneurial thinking. The event significantly strengthened industry-academia interaction and encouraged collaborative problem-solving among participants.



Fig : All Finalists of KnowCode 3.0



Fig : Official Poster of KnowCode 3.0



Fig : Participants Innovating at KnowCode 3.0

Exploring Big Data with Apache Spark

Dr. Sheetal Jagtap and Prof. Deepali Chavan have organised a guest lecture on "Apache Spark: How Big Data Works in the Real World." on 08/04/2026. The main objective was to understand the fundamentals of Apache Spark and its role in big data processing for TY-AIDS students.



Fig : Participants of the Guest Lecture



Fig : Mr. Shivam Singh Delivering a Session on Apache Spark



ACHIEVEMENTS

Essay Writing Competition – National Recognition Achievement by AI-DS

The Department of Artificial Intelligence & Data Science is proud to celebrate the remarkable achievement of our student, Darshana Chandel, who has secured national-level recognition in the National Essay Writing Competition on the theme "Swatantrata ka Mantra – Vande Mataram."

The competition was organized by My Bharat in collaboration with MyGov, attracting participation from across the country. Demonstrating exceptional writing skills and thoughtful expression, she secured an impressive 99th rank and earned a place among the Top 200 participants nationwide.

As a mark of this distinguished accomplishment, she has been awarded a digital invitation by the Ministry of Defence to attend the prestigious Republic Day Parade on 26th January 2026 at Kartavya Path, New Delhi.

This achievement reflects her dedication, creativity, and commitment to excellence, bringing pride to the department and the institution. We extend our heartfelt congratulations and wish her continued success in all her future endeavors.



KJSIT First Year Student Miss Darshana Chandel was invited for Republic Day Parade on 26th January, 2026 at New Delhi for her National Essay "Swatantrata ka Mantra- Vande Mataram"



Fig: Darshana Chandel at Republic Day Hackathon – AI-DS Team Secures Runner-Up

The Department of Artificial Intelligence & Data Science proudly congratulates its students for achieving 1st Runner-Up at the prestigious Hackathon conducted at Fr. C. Rodrigues Institute of Technology, Vashi.

Competing against talented teams, the students showcased their innovation and technical expertise through their project based on the theme "Space Unified Platform – Orbital."



Fig: "Team Innovhers Celebrating Runner-Up Victory at HackQuinox 2026"

Their solution demonstrated creativity, problem-solving ability, and strong teamwork, earning them recognition among the top participants.

This accomplishment highlights the department's commitment to fostering innovation, practical learning, and excellence in emerging technological domains. We extend our heartfelt congratulations to the team for bringing pride to the institution and wish them continued success in their future endeavors.

Elocution Competition – Darshana Chandel Secures 2nd Prize on 25th March 2026

The Department of Artificial Intelligence & Data Science is proud to share that Ms. Darshana Chandel (FY AI-DS) secured 2nd Prize in the Elocution Competition 2026 आयोजित at Somaia Vidyavihar University. The competition was organized in association with the Somaia Debating Society and the Somaia School of Languages & Literature, and was held on 25th March 2026. Demonstrating excellent communication skills and confidence, she stood out among the participants and achieved this commendable position. The department extends its heartfelt congratulations to Ms. Darshana Chandel for her outstanding achievement.



Fig: "Darshana Chandel Honored with 2nd Prize at Elocution Competition 2026"



ACHIEVEMENTS

ICON 2026 Hackathon: Team Techhives Secures 1st Prize!

The Department of Artificial Intelligence & Data Science is proud to announce that Team Techhives secured the 1st Prize (₹15,000) at the ICON 2026 - Code Icon Hackathon, held on 13th February 2026 at K. J. Somaiya Institute of Management. The team - Vinayak Saindane, Raj Vitmal, and Saish Gaikwad, developed "ARTHA, India's AI Financial Co-Pilot," an innovative platform designed to assist salaried individuals in making smarter financial decisions. The solution incorporates features such as AI-powered expense tracking, financial risk analysis, loan approval prediction, debt warning systems, and retirement planning, demonstrating a strong application of AI and data-driven technologies.



Fig: Team Techhives Celebrates 1st Prize Victory at ICON 2026 Hackathon

By addressing real-world economic challenges with such sophistication, these talented students have set a remarkable benchmark for their peers. Their triumph underscores the department's commitment to fostering cutting-edge research, practical engineering skills, and impactful technological solutions. This achievement reflects the team's innovation, technical expertise, and problem-solving abilities. The department congratulates Team Techhives for their outstanding success and wishes them continued excellence in their future.

Bank of Baroda Achiever Award: Mr. Aniruddh Sengupta

The Department of Artificial Intelligence & Data Science is proud to share that Mr. Anirudhh Sengupta (Final Year AI-DS) has been honoured with the Bank of Baroda Achiever Award 2026 for his outstanding accomplishments. This prestigious recognition highlights his dedication, excellence, and remarkable contributions, bringing immense pride to both the department and the institution.



Fig: Anirudhh Sengupta Honored with Bank of Baroda Achiever Award 2026

Throughout his academic journey, Anirudhh has consistently demonstrated an exceptional blend of technical acumen, leadership, and a passion for leveraging data-driven technologies to solve complex problems. This award stands as a testament to his relentless work ethic and his ability to excel under competitive benchmarks, establishing him as a role model for his peers. By balancing rigorous academic standards with impactful co-curricular initiatives, he exemplifies the core values of innovation and excellence that the department strives to instill in its students. The department extends its heartfelt congratulations to Mr. Anirudhh Sengupta for this well-deserved milestone. We celebrate his stellar achievement and wish him continued success, creativity, and distinction in his future professional and academic endeavours.



ACHIEVEMENTS

TANTRA VIHAR 2026 Team CYBERSAFE Secures 2nd Position

Team CYBERSAFE Secures 2nd Place at TANTRA VIHAR 2026 The Department of Artificial Intelligence & Data Science proudly congratulates the Second Year AI-DS team — Laiba Ansari, Mahi Khatri, Vidhi Jain, and Naitri Shah — for securing 2nd Place in the Cyber Security & Cloud Track at the National Level Project Competition – TANTRA VIHAR 2026, hosted by Vidyalankar Institute of Technology, Mumbai, on 10th April 2026. The team presented their project "CYBERSAFE," showcasing innovative solutions in the domain of cybersecurity and cloud technologies. Their achievement reflects strong technical knowledge, teamwork, and problem-solving capabilities. The department extends its heartfelt congratulations to the team for this commendable accomplishment and wishes them continued success in their future ventures.



Fig: Team CYBERSAFE Secures 2nd Place at TANTRA VIHAR 2026

Ideation Competition 3.0: AI-DS Student Participation at State Level Platform

The Department of Artificial Intelligence & Data Science is proud to share that students actively participated in the Ideation Competition 3.0 Grand Finale, held on 30th March 2026 at the prestigious World Trade Center, Mumbai.

The prestigious event was organized by Ratan Tata Maharashtra State Skills University (RTMSSU) in collaboration with the Maharashtra State Innovation Society (MSInS) and MSSU i-Spark Foundation, aiming to foster innovation, creativity, and entrepreneurial thinking among young minds.



Fig: Students Showcase Innovation at Ideation Competition 3.0 Grand Finale, Mumbai

A total of 10 exceptional teams from the AI-DS, Computer Engineering, and EXTC departments proudly represented the college at this state-level platform, out of which 4 outstanding teams were from the AI-DS department. Notably, these teams were meticulously selected from an impressive pool of over 400 teams across Maharashtra, reflecting their innovative ideas, technical acumen, and strong problem-solving capabilities. By engaging with cutting-edge industry standards, the participants actively translated their academic knowledge into impactful, real-world applications. Furthermore, the competition served as a dynamic platform for students to present their visionary ideas, network with industry experts, interact with esteemed jury members, and showcase their immense potential to contribute to future technological advancements. This participation highlights the department's steadfast commitment to nurturing breakthrough innovation and consistently providing students with valuable opportunities to excel at prestigious, high-stakes platforms.



Research Publication – AI-DS Team Publishes in

The Department of Artificial Intelligence & Data Science proudly congratulates Sravan Kotta, Aryan Ilake, Shreyas Konidala, Namitha Prakash, Ashika Jain, Bhargavi Joshi, Mrityunjay Pandey, and Neha Sharma on their successful publication of the research paper titled "AI-Powered Answer Sheet Assessment and Ranking System" in Springer Nature. This achievement reflects the team's dedication, innovation, and research excellence. The department also expresses sincere appreciation to the S4DS mentors for their constant guidance and support. The project presents an AI-based system for automated evaluation of answer sheets by integrating Optical Character Recognition (OCR) with advanced language models. It assesses responses based on relevance and conceptual understanding, enables objective scoring, and generates ranked results.

Chapter 30 AI-Powered Answer Sheet Assessment and Ranking System

Sravan Kotta, Aryan Ilake, Shreyas Konidala, Namitha Prakash, Ashika Jain, Bhargavi Joshi, Mrityunjay Pandey, and Neha Sharma

Abstract This research work introduces an innovative approach to educational assessment by development of an automated system for evaluating and ranking answer sheets. Inspired by the recent surge in LLM as a judge strategy, the system leverages the capabilities of the Gemini 1.5 Pro for Optical Character Recognition (OCR) and evaluation for precise and accurate assessment of answer sheets without human interference. The integration of necessary components has been implemented through Python, enhancing the efficiency and reliability of the evaluation process. The automated system significantly reduces human errors and biases, thereby providing a consistent and objective ranking of student performance. The results demonstrate that the system effectively delivers precise scores, addressing the common issues associated with manual evaluation.

S. Kotta - A. Ilake (ED) - S. Konidala - N. Prakash - A. Jain - B. Joshi
K. J Somaiya Institute of Technology, Mumbai, India
e-mail: sravan.kotta@somaiya.edu

S. Kotta
e-mail: sravan.kotta@somaiya.edu

S. Konidala
e-mail: shreyas.konidala@somaiya.edu

N. Prakash
e-mail: namitha.prakash@somaiya.edu

A. Jain
e-mail: ashika.jain@somaiya.edu

B. Joshi
e-mail: bhargavi.joshi@somaiya.edu

M. Pandey - N. Sharma
Society for Data Science, Pune, India

e-mail: mrityunjay@gmail.com

N. Sharma
e-mail: nvsharma1975@gmail.com

AI-DS Research Team Publishes in Springer Nature

CiiA-5 Innovation Exhibition – Fire Extinguishing Bot Project Selected on 5th–7th

The Department of Artificial Intelligence & Data Science proudly celebrates the achievement of its Third-Year students, whose project "Fire Extinguishing Bot" was selected for the prestigious CiiA-5 Innovations Exhibition & Competitions, held at the Nehru Science Centre from 5th to 7th February 2026.

The project, led by Mr. Atharva Chalke (Team Leader & Lead Innovator) along with team members Mr. Darsh Dawawala, Mr. Darshan Bhanushali, and Mr. Yash Bhavsar, showcases an innovative approach towards fire safety and automation.

The department extends its heartfelt congratulations to the team and wishes them continued success in their future endeavours.



*Fire Extinguishing Bot Team Showcases
Innovation at CiiA-5 Exhibition*

Dr. Nemade Awarded Postdoctoral Certificate from Lincoln University

We are delighted to share that Dr. Milind Nemade has been awarded the prestigious Postdoctoral Research Certificate under the Lincoln Global Postdoctoral & Researcher (LGPR) Programme at Lincoln University. This recognition reflects his dedication to academic excellence, research contributions, and commitment to advancing knowledge in his field.

This remarkable achievement is a testament to Dr. Nemade's hard work, perseverance, and passion for research. We extend our heartfelt congratulations to him on reaching this significant milestone and wish him continued success in all his future endeavors.



Research Certificate from Lincoln University lecture



ACHIEVEMENTS

AI&DS Department Honoured for Contribution to International DSA

The Department of Artificial Intelligence and Data Science at K. J. Somaiya Institute of Technology, Mumbai, has been recognized with a Department Appreciation Certificate for its valuable support, commitment, and contribution towards the successful execution of the International Level Bootcamp on DSA for DeepTech.

About the Bootcamp

The bootcamp was conducted over the course of a month, from May 1, 2026, to May 30, 2026, and was organized by Brainovision Solutions India Pvt. Ltd., in association with AICTE (All India Council for Technical Education) and several distinguished industry and academic partners, including HYDED Samvadini, NEAT (National Educational Alliance for Technology), Anuvadini, and JCI Hyderabad. Structured as an international-level initiative, the program brought together students and faculty to strengthen core skills in Data Structures and Algorithms (DSA) with a specific lens on their application in DeepTech domains — reflecting the growing convergence of foundational computer science and advanced AI-driven technologies.

Recognizing the Department's Role

The certificate, signed by Ganesh Nagu Doddi (Founder & CEO, Brain O Vision Solutions India Pvt. Ltd.), Mrs. Pooja Vidyashankar (CEO, MATH), and Dr. Chandrasekhar Buddha (Chief Coordinating Officer, AICTE), formally acknowledges the department's encouragement, cooperation, and active facilitation that helped make the bootcamp a resounding success. In their official communication, Brainovision Solutions extended their gratitude, noting that the department's continued support has played a significant role in fostering innovation, skill development, and stronger industry-academia collaboration among students.



*Fig: Certificate of Achievement
awarded to Department of AI&DS*

A Step Forward in Industry-Academia Collaboration

This recognition is a proud moment for the AI&DS department and its faculty, particularly Dr. Milind Uttam Nemade, whose encouragement and coordination helped drive student participation and departmental support for the initiative. It reflects the department's ongoing commitment to providing students with exposure to global-standard technical training, beyond the traditional classroom curriculum, and reinforces KJSIT's growing footprint in collaborative, industry-aligned learning initiatives.

Brainovision Solutions India Pvt. Ltd. has expressed enthusiasm for continued collaboration with the department on future initiatives aimed at skill-building and innovation in emerging technology domains.



READERS SECTION

Recent Trends in the AI-DS Domain

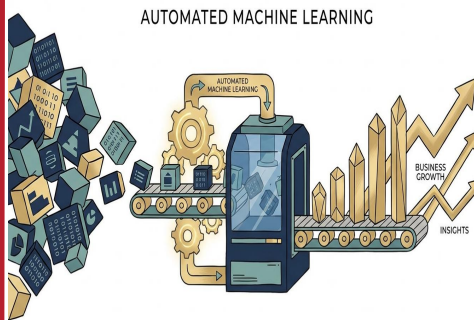
By mid-2026, AI has moved past hype and into real deployment. Agentic systems run production workloads, synthetic data is standard practice, and governance is now a requirement, not a nice-to-have.



Top Trends Redefining the Field

Agentic AI

AI has shifted from reactive assistants to autonomous agents that plan, use tools, and complete multi-step tasks with little supervision. Gartner projects 40% of enterprise apps will embed AI agents by end of 2026, up from under 5% in 2025.



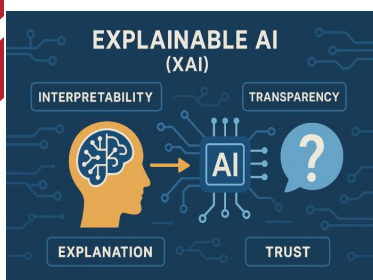
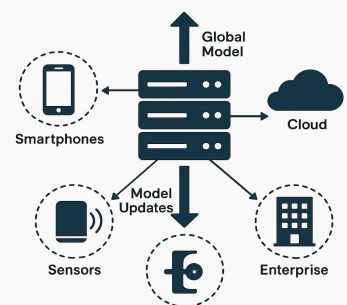
AutoML 3.0

AutoML now auto-labels data, generates synthetic samples to fill gaps, and automates full pipelines. Non-technical teams can build models by simply setting an accuracy goal. This is creating a "citizen developer" culture, similar to how low-code

Synthetic & Federated Data

Synthetic data fills gaps left by scarce or sensitive real-world data, like fraud cases, rare diseases, or edge-case driving scenarios. Federated learning lets institutions train shared models without moving sensitive data. This matters most in finance and healthcare.

FEDERATED LEARNING

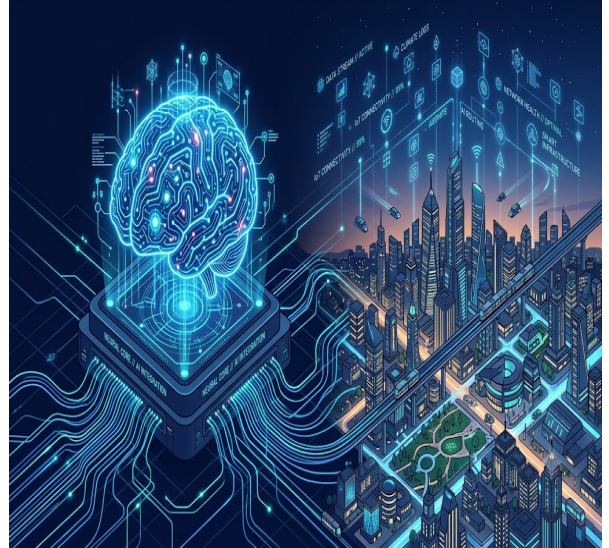


Explainable & Responsible AI

As agents take on real decisions like loans, diagnoses, and fraud flags, transparency is now required. Bias checks and human oversight are built into the AI lifecycle. Explainability is now treated as a baseline standard for high-stakes AI systems.

Current Happenings & Recent Trends in the AI-DS Domain

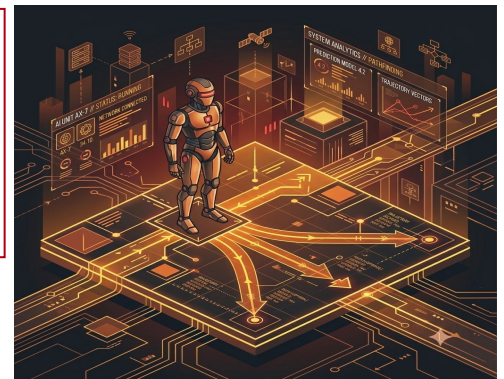
As Artificial Intelligence (AI) and Data Science (DS) continue to reshape the digital world, 2026 has emerged as a year of consolidation, where last year's breakthroughs are being deployed at scale, regulated, and made physical. This section highlights the latest developments, emerging trends, and real-world implications of AI-DS across industries and regions. From boardrooms to research labs, organizations are shifting focus from experimentation to measurable impact, prioritizing efficiency. As these technologies mature, the conversation is no longer just about what AI can do, but how responsibly and sustainably it can be scaled.



Top Trends Redefining the Field

World Models & Physical -

AI is moving beyond text and images into understanding the physical world. World models let systems simulate cause-and-effect, predict outcomes, and power robots and autonomous systems that can navigate real environments.



Small Language Models (SLMs)-

As compute costs and privacy concerns grow, smaller, efficient models trained for specific tasks are gaining ground over giant general-purpose LLMs. SLMs run on-device, offer faster inference, and are becoming the go-to choice for enterprises.

AI in Scientific Discovery-

From drug discovery to materials science, AI models are now accelerating research timelines that once took years into months. Tools like protein-folding and molecule-generation models are being paired with lab automation, turning AI into an active research collaborator rather than just an analysis tool.



Explainable AI (XAI): The Next Generation of Intelligent and Transparent AI Careers

Artificial Intelligence is rapidly transforming industries, but the future of AI depends not only on intelligent predictions—it also depends on trust and transparency. This is where Explainable AI (XAI) plays a vital role. XAI enables AI systems to clearly explain how and why they make decisions, making them more reliable, ethical, and accountable. As organisations increasingly adopt Responsible AI practices, the demand for professionals with expertise in Explainable AI is growing across sectors such as healthcare, finance, cybersecurity, manufacturing, autonomous vehicles, and cloud computing.

Leading technology companies, including Google, Microsoft, IBM, Amazon Web Services (AWS), NVIDIA, Accenture, Tata Consultancy Services (TCS), Infosys, Wipro, and HCLTech, are investing in XAI to build trustworthy AI solutions. This has created exciting placement opportunities for students pursuing Artificial Intelligence, Data Science, and Computer Engineering, with roles such as AI Engineer, Machine Learning Engineer, Data Scientist, Responsible AI Engineer, and AI Research Scientist.

Explainable Federated AI: Building Trustworthy AI Without Sharing Data

Explainable Federated AI combines Federated Learning and Explainable AI (XAI) to create AI systems that are both privacy-preserving and transparent. Federated Learning allows organizations to collaboratively train AI models without sharing sensitive data, while XAI explains how AI makes decisions, improving trust, fairness, and accountability.

This technology is transforming industries such as healthcare, banking, cybersecurity, manufacturing, autonomous vehicles, and edge computing by enabling secure collaboration and supporting compliance with data protection regulations.

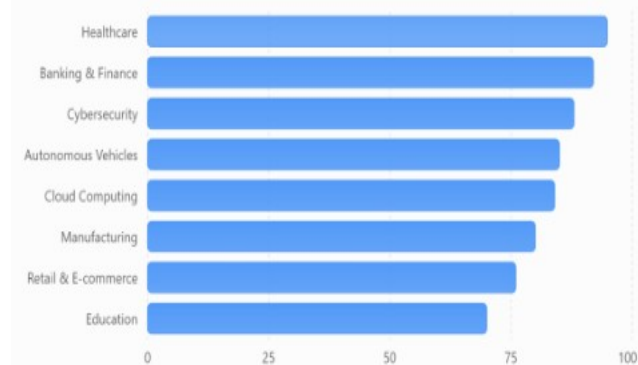
Major companies like Google, Microsoft, IBM, NVIDIA, Intel, AWS, TCS, Infosys, and HCLTech are investing in these technologies. As adoption grows, there is increasing demand for professionals skilled in Machine Learning, Deep Learning, Federated Learning, Explainable AI, Python, TensorFlow, PyTorch, and AI Governance, leading to careers such as AI Engineer, Data Scientist, Responsible AI Engineer, AI Research Scientist, and AI Governance Specialist.

Overall, Explainable Federated AI is shaping the future of AI by combining innovation, privacy, transparency, and trust, making it a promising field for students, researchers, and industry professionals.

- Prof. Deepali Chavan
Department of Artificial Intelligence and Data Science

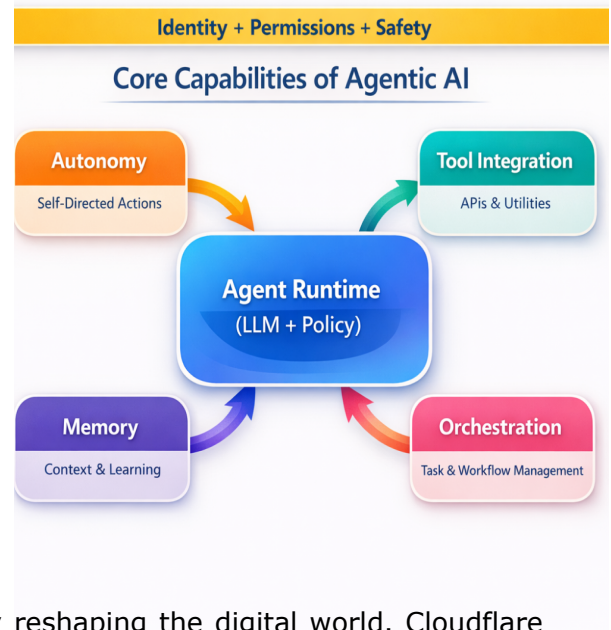
Explainable AI (XAI) Career Opportunities

Major industries actively adopting Explainable AI and creating placement opportunities.



Agentic AI: The Future of Intelligent Systems

Artificial Intelligence is entering a new era. In 2026, the conversation has shifted from chatbots to Agentic AI, intelligent systems capable of reasoning, planning, and completing complex tasks with minimal human intervention. Rather than simply answering questions, these AI agents can collaborate with users, interact with software, and make decisions to achieve specific goals. This shift marks one of the most significant advancements in artificial intelligence, enabling AI to move beyond conversation and actively participate in solving real-world challenges.



The rapid rise of AI agents is already reshaping the digital world. Cloudflare recently reported that automated bot traffic has surpassed human-generated web traffic for the first time, highlighting how autonomous AI systems are becoming a major part of the modern internet. At the same time, leading technology companies, including OpenAI, Google, Microsoft, Anthropic, and NVIDIA, are investing heavily in AI agents that can automate coding, research, data analysis, and business workflows.

Another emerging trend in 2026 is the rise of multi-agent AI systems, where multiple specialized AI agents collaborate to solve complex problems. Instead of relying on a single model, these systems divide tasks among different agents, such as planning, research, coding, data analysis, and quality assurance, before combining their outputs into a final solution. This collaborative approach is improving efficiency in enterprise automation, scientific research, and software development, making AI systems more capable, scalable, and reliable.

Beyond productivity, Agentic AI is driving innovation across healthcare, finance, education, manufacturing, and scientific research. A notable example is Anthropic's Claude Mythos Preview, which helped Mozilla identify and fix 271 security vulnerabilities in Firefox during early testing, demonstrating how AI can assist experts in solving complex real-world challenges. Researchers are also exploring AI agents for drug discovery, climate modeling, and robotics, opening new possibilities that were once considered beyond the reach of traditional AI.

Looking ahead, Agentic AI has the potential to redefine how people learn, work, and solve problems. For students in AI and Data Science, understanding how these intelligent systems are designed, deployed, and governed will be essential for shaping the next generation of technology. The future of AI will belong to those who can build systems that are not only intelligent, but also ethical, secure, and beneficial to society.

- Nida bepari
LY AI-DS