

AI Insights

CSE-Artificial Intelligence Newsletter

January — June 2024 Half Yearly

Issue 1



Nutan Maharashtra Vidya Prasarak Mandal's

NUTAN MAHARASHTRA INSTITUTE OF ENGINEERING & TECHNOLOGY, PUNE

Under administrative support of Pimpri Chinchwad Education Trust (PCET)

AICTE Approved / NAAC Accredited / SPPU Affiliated / DTE CODE : EN6310 / Computer Engineering | Electronics & Telecommunication Engineering | Mechanical Engineering Programs are NBA Accredited



About Institute:

NMIET, established in 2008, is recognized by AICTE, DTE Maharashtra, and affiliated with Savitribai Phule Pune University (SPPU). The institute offers undergraduate courses in Computer Engineering, Information Technology, Mechanical Engineering, and Electronics & Telecommunication. In 2019. NMIET introduced Bachelor of Vocational (B.VOC) courses in Automotive Manufacturing Technology, Refrigeration & Air Conditioning, Graphics & Multimedia. and Software Development, providing diverse learning opportunities for students.

Departments in the institutes:

- Computer Science Engineering
- CSE-Artificial Intelligence
- Computer Engineering
- Electronics & Telecommunication Engineering
- Mechanical Engineering
- Information Technology
- Artificial Intelligence-Data Science
- Bachelor of Vocational Courses

Vision & Mission of the Institute

Vision :

To be a notable institution for providing quality technical education and ensuring ethical, moral and holistic development of students.

Mission :

To nurture engineering graduates with state of the art competence, professionalism and problem solving skills to serve needs of industry as well as society.

Vision & Mission of the CSE-A.I. Department

Vision :

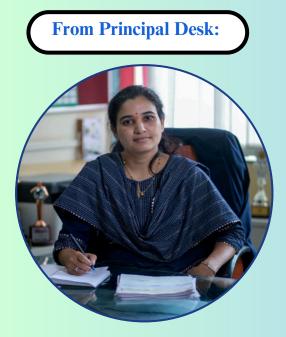
Excellence in the domain of Artificial Intelligence towards serving the greater cause of society and globally recognized for contributing professional engineers with a commitment to the readiness of industry-oriented skill through potential research.

Mission :

- To develop skill-based education and ethical professionals for students that will enhance expertise in through industry-institute interaction and research.
- To apply new optimized advanced methods in problem solutions for various societal challenges.
- To contribute towards innovation through interdisciplinary and analytical skills.



The Department of Computer Science Engineering (CSE-AI) offers an undergraduate program in Artificial Intelligence with an intake of 60 students. Our dedicated faculty mentors students, guiding them to harness their strengths and excel as ambassadors for the department and institute. This cutting-edge program covers programming, software engineering, computer networks, algorithms, and problem-solving, equipping students with a well-rounded computing skill set. Focused on designing intelligent solutions across various industries, the program reflects the rapid growth of AI applications over the last decade. Leading companies like Google, Amazon, Ford, and financial institutions such as Barclays and CitiBank utilize AI for data insights, decision-making, and trend analysis.



Dear Students and Faculty,

I am very happy to introduce the first newsletter of our Artificial Intelligence Department. I appreciate and congratulate the team for their hard work and dedication in bringing this idea to life. This newsletter reflects the strong work culture and teamwork in the department. I am proud of the efforts of our faculty and staff in learning new skills and helping students grow. Let this newsletter be a platform to share knowledge, celebrate achievements, and inspire creativity. I encourage everyone to contribute and make it a success. Together, we can shape a bright future in Artificial Intelligence.



Welcome to the Department of Computer Science & Engineering -Artificial Intelligence, PCET's -NMVPM's Nutan Maharashtra Institute of Engineering and Technology, Pune.

We at NMIET are offering an inspiring 4-year B. Tech program in "Computer Science & Engineering -Artificial Intelligence" for the younger minds who choose to pursue a fruitful profession in Artificial Intelligence and it is the most conspicuous technology that is instrumental in transforming the facet of industry and mankind.

The main goal of this department is to produce skilled engineers with a strong computer science engineering background along with understanding and competencies in Artificial Intelligence which should open the doors to a fruitful career. We are committed to making a profound and lasting contribution to society in this program, we shall grow the knowledge of students to build novel applications using machine learning, Natural Language Processing, Computer Vision, etc. in addition to the state-of-the-art curriculum, with more emphasis is placed on enriching the students learning experience by providing value-added courses, skill development programs and participation in technical competitions. The department is strongly prepared to face new exciting challenges in this new digital era and also to be one of the best institutions in the state of Maharashtra.

For the holistic development of students, we have provided a strong foundation in computer science and problem-solving techniques and are made adaptable to changes with a strong emphasis on value added courses and project-based learning through mini projects, industry visits, guest lectures, student activities, leadership events, etc.

"Skill-based education is the currency of the future through opening the doors to new opportunities".

-Prof. (Dr.) Sagar Shinde Head of the Department CSE-Artificial Intelligence

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Expert Session on Guidelines For Effective Resume Writing and Tips For Good Linkedin Profile

The CSE-AI department hosted a session on "Guidelines for Effective Resume Writing and Tips for a Strong LinkedIn Profile" on February 24, 2024. The guest speakers, Mrs. Snehal Munot, a recruitment consultant, and Mr. Saurabh Shivnekar, a sales manager at Lindstrom Pvt Ltd, led the session. Coordinated by Mrs. Dipika Paranjape, the session was highly interactive and informative, offering students valuable insights on crafting resumes and building LinkedIn profiles. Total 52 students from second and third year attended the session. This session will be greatly beneficial for students, as it provides essential skills for professional networking and creating impactful resumes, which are crucial for future career opportunities.



Felicitation of Mrs. Snehal Munot



Mr. Saurabh Shivnekar guided students on effective resume writing



Felicitation of Mr. Saurabh Shivnekar by HoD Sir



Mrs. Snehal Munot guiding students on building a strong LinkedIn profile.

Session on Entrepreneurship Development – Startup and Innovation

On March 9, 2024, Dr. Bhavana Ambudkar's session on "Entrepreneurship and Innovation" in Lab No. 220. organized by the Department of Computer Science and Engineering - A.I. and coordinated by Mrs. Sujata Jawale, the session welcomed **37 students**. Dr. Bhavana Ambudkar is in charge entrprenurship promotion and innovation cell (EPIC) in Symbiosis Institute of Technology, Pune.

This session focused on entrepreneurship's role in economic growth, job creation, and problem-solving for start-ups. Students learned about innovation, technological advancement, and how to build ventures. The knowledge gained in this session was highly beneficial, empowering students with practical skills for start-ups and equipping them to tackle societal, health, and environmental challenges through entrepreneurship.



Felicitaion of Dr. Bhavana Ambudkar by HoD Sir

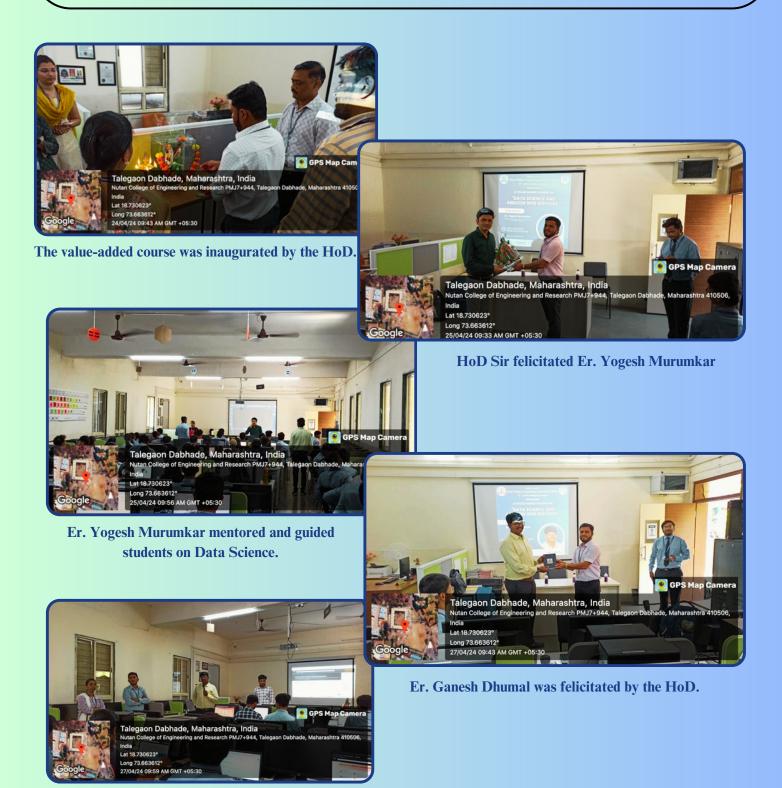


Nutan College of Engineering and Research, Nutan Maharashtra Institute Of Engineering And Technology, Talegaon Dabhade, Maharashtra 410506, India Lat 18.730579°

Long 73.663168° 09/03/24 03:19 PM GMT +<u>05:30</u>

Value Added Course on Data Science and AWS

CSE-Artificial Intelligence Department organized a five-day Value-Added Course on **Data Science and AWS from April 24 to April 28, 2024**. Over **80 students** participated, learning data science fundamentals, cloud computing, and tools like NumPy and SQLTron for database connections. Er. Yogesh Murumkar and Er. Ganesh Dhumal served as a guest trainer for this course.Sessions also covered AWS services like S3 bucket management and AI tools like AWS Polly. This training, coordinated by Ms. Pooja Tambe and Mr. Vaibhav Suryawanshi, will help students build practical skills in data handling and cloud services, boosting their future career prospects by making them more competitive in tech fields that require modern data and AI knowledge.



Er. Ganesh Dhumal trained and assisted students on AWS.

Article

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AI Ethics and Policy

Introduction :

Artificial Intelligence (AI) has rapidly emerged as a transformative force, reshaping industries and societal norms. From automating difficult tasks to powering groundbreaking research, AI's potential is vast. AI is reshaping industries and transforming our daily lives, from enhancing medical diagnostics to revolutionizing financial services and automating complex tasks in manufacturing. Its influence is expanding into sectors where decisions impact human lives, rights, and well-being. While AI's potential for innovation is immense, it also raises critical ethical and societal questions that must be addressed to ensure responsible use. Ethical considerations such as fairness, transparency, and privacy are essential in guiding AI development, as these principles ensure that AI benefits society equitably. As AI continues to grow in power and reach, establishing ethical standards and robust policies will be crucial in shaping a future where AI serves humanity responsibly.

Ten core principles lay out a human-rights centred approach to the Ethics of AI by UNESCO

1. Proportionality and Do No Harm

The use of AI systems must not go beyond what is necessary to achieve a legitimate aim. Risk assessment should be used to prevent harms which may result from such uses.

2. Safety and Security

Unwanted harms (safety risks) as well as vulnerabilities to attack (security risks) should be avoided and addressed by AI actors.

3. Right to Privacy and Data Protection

Privacy must be protected and promoted throughout the AI lifecycle. Adequate data protection frameworks should also be established.

4. Multi-stakeholder and Adaptive Governance & Collaboration

International law & national sovereignty must be respected in the use of data. Additionally, participation of diverse stakeholders is necessary for inclusive approaches to AI governance.

5. Responsibility and Accountability

AI systems should be auditable and traceable. There should be oversight, impact assessment, audit and due diligence mechanisms in place to avoid conflicts with human rights norms and threats to environmental wellbeing.

6. Transparency and Explainability

The ethical deployment of AI systems depends on their transparency & explainability (T&E). The level of T&E should be appropriate to the context, as there may be tensions between T&E and other principles such as privacy, safety and security.

7. Human Oversight and Determination

Member States should ensure that AI systems do not displace ultimate human responsibility and accountability.

8. Sustainability

AI technologies should be assessed against their impacts on 'sustainability', understood as a set of constantly evolving goals including those set out in the UN's Sustainable Development Goals.

9. Awareness & Literacy

Public understanding of AI and data should be promoted through open & accessible education, civic engagement, digital skills & AI ethics training, media & information literacy.

10. Fairness and Non-Discrimation

AI actors should promote social justice, fairness, and non-discrimination while taking an inclusive approach to ensure AI's benefits are accessible to all.

Policies by the International Governments

National Governments:

- United States: While the US has not adopted a comprehensive AI law, various agencies have issued guidelines and policies related to AI. For example, the National Institute of Standards and Technology (NIST) has published guidelines on AI risk management.
- China: China has invested heavily in AI and has developed a national strategy for AI development. This strategy emphasizes the importance of ethical AI, focusing on issues such as safety, security, and societal impact.
- United Kingdom: The UK has established the Centre for Data Ethics and Innovation to promote responsible AI development. The Centre provides guidance on ethical AI practices and supports innovation.
- European Union: The EU has been at the forefront of AI regulation, with initiatives like the AI Act. This comprehensive legislation aims to establish a unified regulatory framework for AI, addressing issues such as risk assessment, transparency, and human oversight.
- India:National Strategy for Artificial Intelligence In 2018, the Indian government, through the NITI Aayog, released the National Strategy for Artificial Intelligence. This comprehensive strategy outlines a vision for India to become a global leader in AI, focusing on:

Government Initiatives

- AI for All: The government is promoting AI education and skill development
- to create a skilled workforce.
- AI in Governance: Leveraging AI to improve public services and governance.
- AI in Healthcare: Using AI for medical diagnosis, drug discovery, and
- personalized healthcare.
- AI in Agriculture: Developing AI-powered solutions for precision agriculture
- and sustainable farming.

Ethical Guidelines for AI

NITI Aayog has also released a set of ethical guidelines for responsible AI development and deployment. These guidelines emphasize:

- Fairness: Ensuring AI systems are unbiased and equitable.
- Accountability: Establishing clear accountability mechanisms for AI-related decisions.
- Transparency: Making AI systems transparent and explainable.
- Privacy: Protecting user privacy and data security.
- Security: Ensuring the security of AI systems and safeguarding against cyber threats.
- Human-Centric Design: Designing AI systems that prioritize human values and wellbeing.

References: -

https://www.unesco.org/en/artificial-intelligence/recommendation-ethics https://www.redflagreporting.com/ethical-implications-of-ai-use-in-the-workplace/ https://globalindiannetwork.com/forum-on-ethics-of-artificial-intelligence/ https://www.nist.gov/itl/ai-risk-management-framework

Submitted By: Stephen Mehtre T.E.(CSE-A.I.)

AI Spotlight

ChatGPT in Volkswagen Cars

Volkswagen announced the integration of ChatGPT into vehicles equipped with the IDA voice assistant. This feature, set to go live in the second quarter of 2024, would be available in Volkswagen's EV range, introducing AI-powered interactions.

OpenAI pitches Sora to Hollywood, wants GenAI video in movies

Last month, <u>OpenAl shared their upcoming tool Sora</u> with the world, a service that can generate realistic videos about a minute in length from a single text prompt. Now, the company is courting Hollywood to use Sora in filmmaking, arranging meetings to discuss partnerships with major studios and media executives.

Sora has yet to be made publicly available, but Bloomberg reports that a few A-list directors and actors have already been given access. Will the future of Hollywood be driven by Al-generated video?

courtesy:https://nypost.com/ https://www.theverge.com/

Parent Teacher Meet, April 24

A Parents-Teacher Meet was organized by the Department of Computer Science and Engineering -Artificial Intelligence. The event occurred in Hall No. 325 and had **31 participants**, including parents, faculty, and students. Coordinated by Mrs. Sujata Gaikwad and Mrs. Komal Rajgude, the meeting covered the department's vision, academic progress, skill-based education, and plans for the upcoming semester.

Highlights included a session by **Dr. Sandeep Kadam** on placement challenges and insights into training and internship opportunities. The outcomes focused on parents understanding the college's enhanced teaching methods, value education, and student engagement through various activities. The meet concluded with a vote of thanks, acknowledging the positive impact of collaborative efforts between parents and faculty.



Highlights of the Parent-Teacher Meeting

Article

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Understanding Edge Computing: The Future of Real-Time Data Processing

Edge computing is a technology that brings data processing closer to the data source rather than relying only on cloud servers. Meaning that it brings the data processing closer to where the action is taking place right on the edge of the network instead of sending everything to a central server the data is processed near the source. This technology is important because as we know currently we are generating tons of data daily, which sending to a central can slow down things significantly. Edge computing speeds things up as the distance of sharing to processing is reduced.

It is in trend due to the need for faster decision-making and decreasing the load on the central network which helps reduce bandwidth usage and data transfer costs. By utilising this we also enhance data privacy since sensitive information can be analysed locally rather than sending to external servers. This technology has lots of applications in sectors like manufacturing, retail, telecommunication and healthcare where secure data processing is essential.

Edge computing's real world applications have lots of impact in healthcare, like embedded devices inside the body for tracking patients' vitals. Retail stores use this technology to monitor customers, inventory and handle the store's settings. In smart cities they help manage traffic lights and monitor public safety in real time. This ensures emergency vehicles can move smoothly.

The benefits of speed, reduced costs and privacy & security doesn't mean it's perfect. It comes with issues with managing many edge devices and ensuring they work together. Also having data processed at various locations can make it tricky to keep everything secure. These challenges must be managed to ensure we harness the true power of edge computing.

As more and more devices connect to the internet, edge computing will only grow to unlock faster, smarter networks that benefit everyone. This enhanced management in data will help it improve daily life and support major technology based on data. This is creating new opportunities for us to develop around this technology benefiting everyone without losing efficiency.

The future of edge computing promises to further enhance smart cities and Internet of Things (IoT), supporting faster, more localised data processing that improve everyday life.

References:

https://networkencyclopedia.com/edge-computing-the-frontier-of-modern-data-processing/ https://www.geeksforgeeks.org/edge-computing/

Seminar on Higher Studies and Career Opportunities





Snapshots of the session Higher Studies and Career Opportunities

On May 8, 2024, the CSE-AI Department held a seminar titled "Higher Studies and Career Opportunities" by Mr. Sumit Acharya(Manager, Business SI-Uk Gobal India) focusing on studying abroad, especially in the UK. Coordinated by Mrs. Dipika Paranjape and Mr. Vaibhav Suryawanshi, the session covered the UK education system, cultural diversity, university options, and application processes, including scholarships and visas, helping students make informed choices about international education. The session benefited a total of **26 students**.

Expert Session on Professional Ethics & Responsibility

On April 15, 2024, the CSE-AI Department hosted an engaging session on "**Professional Ethics & Responsibility**," led by **Mrs. Swati Bedekar, Executive Assistant to the Vice Chancellor at Pimpri Chinchwad University, Pune**. The session provided students with key insights into essential professional rules, responsibilities, and ethical decision-making, preparing them to tackle real-world challenges with integrity and confidence. A total of **50 students** benefited from the session.



Highlights of the session Professional Ethics & Responsibility

Expert Session on Big Data Framework and Cloud Computing

On May 9, 2024, the CSE-A.I. department conducted an informative session on "Modern Tools in Big Data and Cloud Computing" by Dr. Prathmesh Lahande(Faculty and Researcher-Symbiosis College,Pune) in the CSE-AI, Organized by the Department of Computer Science and Engineering (Artificial Intelligence), the event, coordinated by Mrs. Priyanka Vyas and co-coordinated by Mrs. Kanchan Bhagat, saw the participation of 37 students.

Students gained practical experience with industry tools like Cloud Analytics and frameworks such as Kafka and Spark. This session was especially beneficial in enhancing students' technical skills, preparing them for real-time data analysis, and encouraging teamwork and entrepreneurship in cloud technology.



Dr. Prathmesh clarified complex concepts through an interactive presentation.

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The Future of Work with AI: Emerging Careers and Essential Skills

Artificial intelligence (AI) is rapidly transforming industries worldwide, automating tasks, enhancing productivity, and creating more efficient systems. But while headlines often focus on the jobs AI could replace, there's another side to this story: AI is also creating a range of new job opportunities. Understanding how AI is shaping the workforce can help us prepare for the future, ensuring that people have the skills needed to thrive in an AI-driven world. Here, we'll explore how AI is creating jobs, emerging roles in AI, and the skills that will be essential for a successful career in the age of AI.

AI as a Job Creator, Not Just a Job Displacer

While AI can automate repetitive tasks, it also opens doors for innovation and creates jobs that were previously unimaginable. Just as the industrial revolution shifted labor from farms to factories and the digital revolution moved work from paper to screens, AI is sparking a transition in the job landscape. AI-powered industries like healthcare, finance, education, and logistics are experiencing demand for roles that support AI technology everything from data processing to model training and ethical oversight.

Consider the healthcare industry: AI-driven diagnostics are helping medical professionals detect diseases more accurately and earlier than ever. This isn't about replacing doctors; rather, it's about empowering them with better tools. As a result, AI is creating roles in medical data analysis, AI ethics in healthcare, and the development of AI-enhanced medical devices.

In finance, AI algorithms analyze data to help predict market trends, identify fraud, and manage risk, creating demand for professionals who understand both finance and AI. Even fields like education and customer service are seeing growth in AI-related roles as these sectors leverage technology for personalized learning and more responsive customer interactions.

Emerging careers in AI-Driven Industries

As AI technology advances, new roles are emerging that cater specifically to the needs of AI systems. Here are some of the most promising AI-related careers:

AI-Ethicist: AI Ethicists focus on addressing issues like bias, fairness, and transparency, ensuring that AI systems are used responsibly and equitably.

Machine Learning Engineers and Data Scientist: These professionals are vital for developing, fine-tuning, and deploying machine learning models. They work on processing data, building algorithms, and designing AI systems, making them core players in AI innovation.

AI Trainers and Annotators: AI systems, especially those using supervised learning, need vast amounts of labeled data. AI Trainers and Annotators provide labeled data to train these models, especially in specialized fields like medical imaging or autonomous driving.

Robotic Process Automation (RPA) Specialist: RPA specialists implement AI-driven automation to streamline organizational processes, from automating data entry to handling repetitive business tasks. As businesses adopt RPA to boost efficiency, the demand for these specialists is increasing.

Natural Language Processing (NLP) Engineers: With the rise of conversational AI systems like chatbots and virtual assistants, NLP Engineers who specialize in language-based AI applications are in high demand. They work to improve human-computer interactions, making these systems more natural and user-friendly.

Skills For AI Driven Future: Machine Learning and Data Science: Knowledge of machine learning algorithms, data processing, and statistical analysis is critical. Familiarity with programming languages like Python and R, along with machine learning frameworks like TensorFlow and PyTorch, can make candidates competitive.

Data Management and Analysis: Analyzing and interpreting data is a fundamental skill as AI systems rely on large datasets. Skills in data cleaning, visualization, and tools like SQL and Excel are increasingly important.

Cloud Computing: Many AI systems are deployed on cloud platforms, so understanding services from AWS, Azure, or Google Cloud can be an asset, especially in companies looking to integrate scalable AI solutions.

Preparing the Workforce for AI Future: Educational institutions, government bodies, and private companies play a critical role in readying the workforce for AI. Universities are introducing AI-focused courses, and many offer online certificates in machine learning, data science, and AI ethics. In addition to formal education, initiatives like government-backed skill programs and corporate upskilling efforts are helping employees gain the technical expertise and adaptive skills needed in a modern workplace. In India, for instance, the government's Skill India initiative focuses on training people in digital and technical skills, preparing them for roles in a technology-driven economy. Similarly, companies like IBM, Google, and Microsoft offer certifications and training in AI and data science, empowering individuals to build the skills necessary for a dynamic career path.

Embracing AI as a Catalyst for Growth: The rise of AI signals more than just a technological shift; it represents a chance to redefine how we work and create value. Rather than simply replacing human jobs, AI can catalyze new careers, open doors to innovation, and reshape entire industries. As AI continues to advance, so too will the opportunities for people equipped with the right skills and a mindset geared toward adaptation and growth.

By embracing the possibilities AI offers and investing in skills for the future, we can ensure that this technology not only transforms industries but also elevates the global workforce, creating a future where people and AI work side by side for a brighter, more connected world.

References: Here are some reference websites for an article.

World Economic Forum (WEF) – Provides an in-depth look at the skills that will be most in demand in an AI-driven job market, with a focus on adaptability and core skills.

⊠ World Economic Forum (WEF) – <u>https://www.weforum.org</u>

Analytics Insight – <u>https://www.analyticsinsight.net</u>

MIT Sloan School of Management – <u>https://mitsloan.mit.edu</u>

⊠ Jobs for the Future (JFF) – <u>https://www.jff.org</u>

Analytics Insight – This site gives insights into emerging trends in AI careers, with detailed predictions for job roles and skill requirements by 2025.

Jobs for the Future (JFF) – JFF's AI-Ready Workforce report examines how AI will transform job roles rather than replace them, underscoring the need for durable, human-centered skills.

Submitted By: Nikeeta Garrade T.E. (CSE-A.I.)

Key figures in the field of AI



Often dubbed the "Godfather of Deep Learning," Geoffrey Hinton's contributions have been foundational. His work on neural networks and backpropagation algorithms laid the groundwork for modern AI. Hinton's pioneering research has been instrumental in the development of technologies such as speech recognition and image processing. X: <u>@geoffreyhinton</u>



A key figure in the field of machine learning, Yann LeCun is known for his work on convolutional neural networks (CNNs). Currently the Chief AI Scientist at Facebook, LeCun's innovations are central to advancements in computer vision and have numerous applications in fields ranging from autonomous driving to medical diagnostics. X: <u>@ylecun</u>



Co-founder of Google Brain and former Chief Scientist at Baidu, Andrew Ng is a leading voice in AI education and research. His online courses and initiatives, such as Coursera, have democratized AI knowledge, making it accessible to millions worldwide. Ng's influence extends through his numerous research contributions and his role in shaping AI policy and ethics discussions. X: <u>@AndrewYNg</u>

Expert Session on Problem Formulation and Problem Solution in Environmental Context and Need for Sustainable Development

On May 10, 2024, the department hosted a session titled "Problem Formulation and Solution in Environmental Context and Need for Sustainable Development" by Dr. Amar Chipade(Assistant professor-Dr. D.Y.Patil Institute of Technology). Organized by the Department of CSE- Artificial Intelligence, this session aimed to help 71 participating students understand and address environmental challenges using AI solutions. The expert speaker discussed issues like deforestation, air pollution, and sustainable agriculture, emphasizing AI's role in creating effective solutions. This session will significantly aid students' project work by enhancing their skills in problem identification, teamwork, and sustainable project management, critical for their professional growth in AI.



Felicitation of Dr. Amar Chipade



Different activities are performed during the session by the students



The HoD highlighted the significance of the session.



Dr. Amar explained various aspects of the subject

In-House Training on PCB Design and Fabrication

The CSE-AI department conducted an in-house training on "PCB Design and Fabrication' on May 17, 2024. In this session, Mrs. Sujata Jawale, Mr. Kiran Jadhav, and Mrs. Jayshree Gujar guided approximately 35 students through both the simulation and actual fabrication processes of PCB design. This session was conducted by Mrs. Komal Deokar.

This training equipped students with hands-on experience in PCB design, which is essential for building electronic devices and systems. By mastering these skills, students can enhance their technical capabilities, preparing them for real-world applications in electronics and related fields.











Highlights of the In-House Training on PCB Design and Fabrication session

Value Added Course on Artificial Intelligence and Machine Learning sponsored by VOIS & CDF

The Department organized a value-added course on Artificial Intelligence and Machine Learning, sponsored by VOIS and CDF, from May 20 to May 24, 2024. Mr. Yogesh Raje from the VOIS team served as an excellent instructor, thoroughly explaining AI and ML concepts to students. A total of 138 students have attended the course. He incorporated various small projects into the sessions, allowing students to gain hands-on experience. The course was coordinated by Ms. Uttara Varade and Ms. Pooja Tambe.

This session was invaluable for students, as it provided practical skills and knowledge in AI and ML, preparing them for real-world applications and boosting their confidence in working with modern technologies.

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Felicitation of Mr. Yogesh Raje

Talegaon Dabhade, Maharashtra, India Nutan college of engineering and research Lat 18.723714° Long 73.660795° 20/05/24 10:48 AM GMT +05:30

Principal addressing students

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Mr. Yogesh Raje sir introduced by Ms. Uttara Varade Talegaon Dabhade, Maharashtra, India Nutan college of engineering and research Lat 18.723714° Long 73.660795° 22/05/24 11:28 AM GMT +05:30

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GPS Map Camera

Snapshots of the 5 Day Value Added Course

Industrial Visit to Pune Techtrol Pvt. Ltd, Bhosari, Pune

The CSE-AI department organized an industrial visit to **Pune Techtrol Pvt. Ltd, Bhosari, Pune**, on April 16, 2024. Students gained valuable insights into the principles behind the operation of level gauges for liquids and solids, as well as sensors and transmitters used in industrial automation. They also explored various sensor technologies, including ultrasonic, radar, capacitance, and hydrostatic sensors, learning about their benefits and applications.

The visit enhanced students' technical skills in machinery operation and strengthened their soft skills, such as teamwork, communication, and problem-solving. The visit was coordinated by Mrs. Sujata Jawale and Ms. Uttara Varade. Total 39 students were present for the industrial visit.



Industrial visit to Pune Techtrol Pvt. Ltd, Bhosari



Company staff explained about the differnt products of the company



Students gained knowledge about various machinery and their functioning.





Glimpses of the industrial visit to Pune Techtrol Pvt. Ltd, Bhosari









First Rank in Best Innovation category in IDE Bootcamp Phase 3, J & K Ms. Pooja Tambe secured third rank in M.Tech (Computer Engineering in Pimpri Chinchwad College of Engineering (PCCOE), Pune with CGPA of 9.18







Faculty Participation in STTP/FDP/Workshop/Exhibition



Maharashtra MSME Defence EXPO 24th-26th Feb 2024



FDP on Universal Human Values 15th March -17th March 2024

SL No.	Name of Faculty	Subject / Domain	Conference-Workshop- STTP-FDP-Training Organization Name (University/ Institute / Department)	Duration
	Prof. (Dr.) Sagar Shinde	FDP	Implementation of NEP- 2020 in Affiliated Higher Education Institution	16-01-2024 to 20-01-2024
1		FDP	Recent Research Trends in Engineering	18-01-2024 to 22-01-2024
		FDP	Data Analytics Using Power BI	08-01-2024 to 12-01-2024
		FDP	Industry 5.0 for Society 5.0	18-03-2024 to 22-03-2024
2	2 Dr. Ashwini Shinde FD		Intellectual Property Rights "INSIGHT OF INDIAN PATENTS"	18-03-2024 to 22-03-2024
	Dr. Deepali Bongulwar	FDP	Implementation of NEP- 2020 in Affiliated Higher Education Institution	16-01-2024 to 20-01-2024
		FDP	Recent Research Trends in Engineering	18-01-2024 to 22-01-2024
3		Workshop	AI & Automation in MS Excel	3 Hours-04-02-2024
		FDP	Deep Drive into Data Science and Machine Learning	26-02-2024 to 01-03-2024
		FDP	Train-the Trainer	02-01-2024 to 06-01-2024
	Mrs. Priyanka Vyas	FDP	Implementation of NEP- 2020 in Affiliated Higher Education Institution	16-01-2024 to 20-01-2024
		FDP	Recent Research Trends in Engineering	18-01-2024 to 22-01-2024
4		FDP	Emerging Trends in Semiconductors	15-01-2024 to 20-01-2024
		Workshop	MATLAB Onramp	09-02-2024

		Workshop	Navigating the Research Article Publications Landscape from Writing to Publishing: Mastering the Academic Joumey of Research	14-03-2024 to 16-03-2024
		FDP	Computer Vision and Image Processing – Fundamentals and Applications	12 Weeks
		FDP	Deep Drive into Data Science and Machine Learning	26-02-2024 to 01-03-2024
	Ms. Uttara Varade	FDP	Implementation of NEP- 2020 in Affiliated Higher Education Institution	16-01-2024 to 20-01-2024
5		FDP	Recent Research Trends in Engineering	18-01-2024 to 22-01-2024
		STTP	Recent Developments in Advanced Materials	02-01-2024 to 06-01-2024
		FDP	Inculcating Universal Human Values in Technical Education	15-03-2024 to 17-03-2024
	Mrs. Dipika Paranjape	FDP	Implementation of NEP- 2020 in Affiliated Higher Education Institution	16-01-2024 to 20-01-2024
6		FDP	Recent Research Trends in Engineering	18-01-2024 to 22-01-2024
		STTP	Applied ML: Exploring Real World Applications	15-01-2024 to 19-01-2024
7	Mrs. Sujata Jawale	FDP	Implementation of NEP- 2020 in Affiliated Higher Education Institution	16-01-2024 to 20-01-2024
		FDP	Recent Research Trends in Engineering	18-01-2024 to 22-01-2024

	8	Mrs. Komal Rajgude	FDP FDP STTP	Implementation of NEP- 2020 in Affiliated Higher Education Institution Recent Research Trends in Engineering Applied ML: Exploring Real World Applications	16-01-2024 to 20-01-2024 18-01-2024 to 22-01-2024 15-01-2024 to 19-01-2024
-			FDP FDP FDP	Implementation of NEP- 2020 in Affiliated Higher Education Institution Train-the Trainer Recent Research Trends in Engineering	16-01-2024 to 20-01-2024 02-01-2024 to 06-01-2024 18-01-2024 to 22-01-2024
	9	Ms. Pooja Tambe	FDP	Deep Drive into Data Science and Machine Learning Recent Developments in	26-02-2024 to 01-03-2024
			STTP	Advanced Materials Applied ML: Exploring Real World Applications	15-01-2024 to 19-01-2024

Learning Routes





Research and Publications :

Sl. No.	Name of Faculty	Conference/ Journal Name	Scopus Index / Impact Factor	National / International Level	Academic Year
	Prof. (Dr). Sagar	5th International Conference of Emerging Technology (INCET 2024)	IEEE	International	2023-2024
1	Shinde	5th International Conference of Emerging Technology (INCET 2024)	IEEE	International	2023-2024
		International Conference on Automation and Computation (AUTOCOM-2024)	IEEE	International	2023-2024
2	Ms. Pooja Tambe	International Conference on Intelligent Computing and Big Data Analytics 2024 (ICICBDA-2024)	Springer	International	2023-2024

Aashay Choudhari, B.Tech (2023-24) has presented a paper in 9th International IEEE confernce on convergence Technology(I2CT), from 5th to 7th April 2024



Aashay Choudhari attended IEEE conference











Ms. Uttara Varade, Assistant Professor published a book on : Cloud Computing and Cyber Security" with Scientific International Publishing House (SIPH)

Special Achievement/Recognition

Dr. Sagar Shinde, HoD of CSE-A.I. join the elite rank of IEEE Senior Members



Dr. Sagar Shinde, HoD of CSE-A.I. received the Best Researcher of the year award in AAGAZ 24



Mrs. Priyanka Vyas received Best Teacher of The Year award in AAGAZ 24



CSE-A.I. Department received the Best Department of the year award in AAGAZ 24



First Graduated Batch of B. Tech in CSE - A.I. 2023-24

"Look at the sky. We are not alone. The whole universe is friendly to us and conspires only to give the best to those who dream and work."

Dr. A.P.J. Abdul Kalam

"Never lose a holy curiosity. Curiosity has its own reason for existing. One cannot help but be in awe when one contemplates the mysteries of eternity, of life, of the marvelous structure of reality."

Albert Einstein

"Your work is going to fill a large part of your life, and the only way to be truly satisfied is to do what you believe is great work. And the only way to do great work is to love what you do."

Steve Jobs

Staff of the CSE-Artficial Intelligence Department

Prof. (Dr.) Sagar Shinde, Head of the Department Dr. Ashwini Shinde, Associate Professor Mrs. Priyanka Vyas, Assistant Professor Mrs. Dipika Paranjape, Assistant Professor Dr. Dipali Bongulwar, Assistant Professor Mrs, Sujata Jawale, Assistant Professor Ms. Uttara Varade, Assistant Professor Mr. Vaibhav Suryawanshi, Assistant Professor Ms.Pooja Tambe, Assistant Professor Mrs.Komal Rajgude, Teacher Assistant Ms. Kanchan Bhagat, Teacher Assistant Mrs. Jayshri Gujar, Lab Assistant Mr. Pratap Chandekar, Lab Assistant Shri. Vishal Chandekar, Peon

