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ATHARVA ROBOTICS CENTER

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15th October, 2025

Caltech and Technology Innovation Institute Demo Multirobot Response Team

By Caltech, October 14, 2025

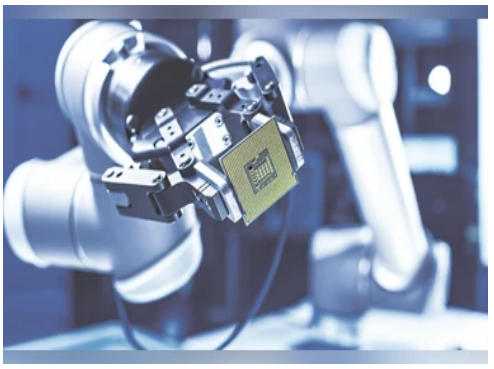
The new multimodal system is one product of a three-year collaboration between Caltech's Center for Autonomous Systems and Technologies (CAST) and the Technology Innovation Institute (TII) in Abu Dhabi, United Arab Emirates. The robotic system demonstrates the kind of innovative and forward-thinking projects that are possible with the combined global expertise of the collaborators in autonomous systems, artificial intelligence, robotics, and propulsion systems.

Indian PM meets Qualcomm CEO to discuss AI, semiconductors, and 6G development

By Joanna Gao, Taipei; Jingyue Hsiao,October 14, 2025

Indian Prime Minister Narendra Modi recently held talks with Qualcomm CEO Cristiano Amon to discuss technological cooperation in artificial intelligence (AI), semiconductors, and 6G advancements. The leaders shared perspectives on the future of India's tech ecosystem on X, emphasizing the country's expanding role in the global technology landscape.

2D materials: India's chance to leapfrog in the semiconductor race



By B V R Subrahmanyam ,October 14, 2025

India must prioritise 2D materials to leapfrog in semiconductors, quantum computing, and energy tech, securing strategic IP, economic growth, and global influence. India, despite having a strong design talent pool and growing semiconductor ambitions, is still at a nascent stage in 2D research.

The Future Of Semiconductor Manufacturing: How AI And Industry Collaboration Are Reshaping The Value Chain

By John Kibarian, October 14, 2025

The semiconductor industry stands at an inflection point. As Moore's Law scaling becomes increasingly challenging and system complexity explodes through advanced packaging and chiplet-based architectures, the traditional siloed approach to manufacturing must give way to an unprecedented level of industry collaboration. This transformation, driven by the convergence of artificial intelligence, cloud analytics, and secure data sharing platforms, represents perhaps the most significant operational evolution since the foundry model.

The Basque Government and IBM Inaugurate Europe's first IBM Quantum System Two in Donostia-San Sebastián

By IBM, October 14, 2025

SAN SEBASTIÁN, Spain, Oct. 14, 2025 /PRNewswire/ -- The Basque Government and IBM (NYSE: IBM) today unveiled the first IBM Quantum System Two in Europe at the IBM-Euskadi Quantum Computational Center in San Sebastián. The installation of this system marks a milestone in the partnership between the two parties, which began in 2023 within the framework of the BasQ – Basque Quantum initiative, promoted by the Basque Government to help make Euskadi an international hub for quantum technologies.

IIT Roorkee launches advanced certificate in quantum computing and AI/ML to train professionals

By Ani , October 14, 2025

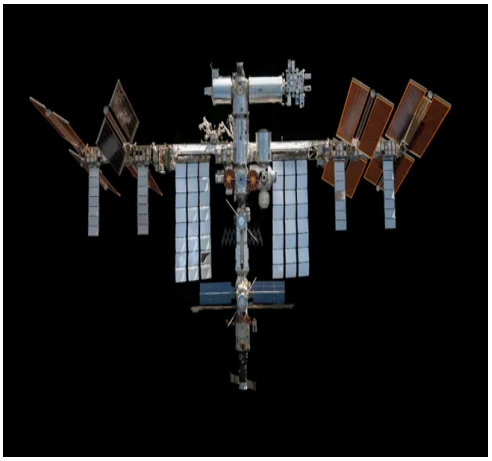
The Indian Institute of Technology (IIT) Roorkee has launched the first batch of the Advanced Certificate in Quantum Computing: Algorithms and AI/ML, designed to help professionals upskill for the quantum era.According to a release, learners will progress from quantum internet protocols and secure communication to quantum machine learning, through hands-on projects using Qiskit, PennyLane, and IBM Quantum Systems.

Citizen scientists just discovered the most powerful 'odd radio circle' twins in space we've ever seen

By Keith Cooper, October 14, 2025

Citizen scientists have found several new "odd radio circles<" or ORCs, in distant, enormous galaxy clusters — and through their discoveries, scientists are learning more about how these huge ring-like structures form.ORCs were first identified only six years ago, in 2019, by Anna Kapinska of the National Radio Astronomy Observatory while perusing observations made by the Australian Square Kilometre Array Pathfinder (ASKAP). ORCs are huge, up to 50 times larger than our Milky Way galaxy, which itself is about 100,000 light-years across. They are invisible at optical, infrared and X-ray wavelengths, their ghostly structures detectable only by radio telescopes.

NASA will say goodbye to the International Space Station in 2030 – and welcome in the age of commercial space stations



By John M. Horack, October 14, 2025

This article was originally published at The Conversation. The publication contributed the article to Space.com's Expert Voices: Op-Ed & Insights.For 24 hours a day, seven days a week since November 2000, NASA and its international partners have sustained a continuous human presence in low-Earth orbit, including at least one American – a streak that will soon reach 25 years.

Meet Moflin: Casio's lovable furry robot pet with 4 million customised emotions

By Tech Desk, October 14, 2025

Move over ChatGPT or Gemini! If you feel the urge to pamper your emotions with more than just textual or voice-based conversations, the therapeutic technology industry (yes, that's a thing) has a cute little thing to pamper you better than your average pet. Meet Moflin, a unique new product that nobody thought they ever wanted. Moflin wants to be your pet – even better, it wants to be better than your average Golden Retriever or a furry cat. This cutesy soft toy-like robot promises the same sort of satisfaction as a real pet.

News Articles

TECH I'D LIKE TO SEE

AI THAT'S AGILE, ACCESSIBLE AND AFFORDABLE

The future of AI isn't just about innovation – it's about making AI highly accessible, cost-effective, and seamlessly integrated into everyday digital experiences. By leveraging edge computing, we can bring AI inferencing closer to users, reducing latency, optimising performance, and significantly lowering costs. Emerging AI models prove that intelligence can run efficiently on leaner infrastructure, making AI more scalable and practical for diverse applications. Imagine a future where AI-driven autonomous vehicles communicate in real-time with smart city infrastructures. Traffic lights, pedestrian crossings, and road sensors equipped with edge computing capabilities can process data locally, enabling instantaneous decision-making. This would allow for dynamic traffic management, reducing congestion and enhancing safety by predicting and preventing potential accidents before they occur. This is the kind of tech I envision, where AI is no longer confined to centralised cloud environments but deployed at the edge, where real-time intelligence drives immediate impact.

Mitesh Jain | REGIONAL VP, AKAMAI INDIA

iToons Ajit Ninan & Sunil Agarwal

GLOSSARY OF IN-GROUP TERMS USED ON THIS PAGE

RED TEAMING

In cybersecurity, red teaming is a simulated cyber-attack exercise designed to test an organisation's defences, detection capabilities, and response readiness. A "red team" of ethical hackers mimics real-world adversaries, using the same tactics, techniques, and procedures that actual attackers might deploy. Their goal isn't just to find vulnerabilities, but to challenge assumptions, uncover blind spots, and improve coordination across security, IT, and leadership teams. Red teaming complements penetration testing by focusing on broader attack scenarios, persistence, and detection rather than isolated system flaws. It ultimately helps organisations strengthen resilience against genuine cyber threats.

HOW AI IS REDEFINING A CYBER ENGINEER'S DAY

Mastering data science and understanding AI models are crucial now

AbhiJ.George@timesofindia.com

Sharda Tickoo has seen more than most in cyber security. The veteran of over twenty years and country manager for India and Saarc at Trend Micro, a Tokyo-headquartered global cybersecurity firm that has a big presence in India, says she remembers when days were defined by dashboards and dogged manual triage. "The biggest shift for cybersecurity engineers is from reactive firefighting to proactive threat management."

Threat-detection models now, she says, automatically tell an engineer what they should prioritise by giving more context and more risk assessments, while incident-response playbooks that once took time and rare expertise can be dynamically created and triggered rather than written from scratch. The difference, she argues, is that a lot of tasks which required human intervention are now being done intelligently, freeing teams to focus on the bigger questions of architecture, attack-surface reduction and improving the logic that sits inside detection models.

Tickoo breaks the day down simply. The security operations centre (SOC) — the round-the-clock watch room for an organisation — used to hand-sort alerts, write reports and chase down logs. Today, triage for cybersecurity breaches are machine-assisted: similar events are grouped, risk is ranked, and an initial response is drafted for a human to approve.

Forensics is faster too: instead of manually stitching together how an attacker got in and what else they touched, AI traces the likely chain and surfaces the "blast radius" for review. Vulnerability management has moved from endless security patch lists to practical prioritisation, with predictive and virtual patching helping teams decide what to fix first.

None of this removes the human; it redirects them, Tickoo argues. "AI has pretty much taken over what L1 and L2 engineers would do. Which means they can be upskilled to do something more meaningful," she says, such as assisting L3s with deeper investigations and connecting the dots across systems.

Upskilling is non negotiable

Tickoo's view on skills is particularly relevant for young cyber engineers. "The future belongs to security engineers who can speak data," she says. That means basics like data analytics, scripting and APIs, plus an ability to read how models flag anomalies and behaviours so nothing is accepted blindly. Just as important is judgement. "We should know when to override automation," she says. Security, after all, is there to enable the business; uptime matters hugely, and the human must decide when to pause an automated action because the context is risky.

From the customer end of the market, Sunil Sharma, VP & MD for sales (India and Saarc) at Sophos, sees the same re-balancing of effort. "Alerts that previously took hours to investigate can now be triaged instantly," he notes; the result is more time for threat hunting and incident-response strategy rather than chasing every bell and whistle. He stresses that engineers must learn to interpret what AI says, not just accept it. Beyond network and malware basics, teams need "a solid understanding of how these systems detect threats, prioritise alerts, and adapt," plus the judgement to overrule a model when context demands it. Upskilling is needed and has to be structured.

Huzefa Motiwala, senior director of technical solutions for India and Saarc at Palo Alto Networks, is blunt about the balance. "AI hasn't replaced the cybersecurity engineer — but it has completely redefined what a good one does in a day," he says. Where analysts once stitched together clues by hand across endpoints, firewalls and cloud logs, AI now "connects patterns across millions of signals in seconds," with humans supervising, validating and acting.

The craft is evolving: engineers write detection-as-code and automate response scripts; they learn enough data science to question a model's output and enough about adversarial AI to know where it can fail. Yet some instincts stay timeless. "The best analysts still have that gut instinct... You can teach an AI to flag anomalies, but not to sense unease. And that's what keeps the human in the loop indispensable," Motiwala says. To make that instinct scale, his teams pair engineers with data scientists on joint hunts and run red-team drills against AI agents, treating models as assets that require monitoring and protection like any endpoint or API.

If defence is changing, so is recovery. Balaji Rao, area VP for India & Saarc at Commvault,the company that specialises in data protection and recovery for big enterprises, argues that AI is moving cyber from a narrow operations function into the intersection of intelligence, strategy, and operational resilience in the face of any disruption in our volatile world. In practice, that looks like anomaly-spotting in backups to flag compromise early; recommending the last clean recovery point so teams don't accidentally restore infected data, and triggering pre-approved recovery workflows via integrations, so containment and restoration start while investigations continue.

To a non-specialist, it means fewer nasty surprises and less downtime. Upskilling, he adds, mirrors that breadth: data analytics and ML fundamentals to read AI-driven insights; cloud and hybrid-security depth as environments sprawl; and a firm grip on privacy and governance because that's basic when you're trying to secure the data of large enterprises like Commvault does.

Trend Micro's Tickoo adds that she has lived through fashions that promised to cut the grind, but admits that AI is the first to deliver relief at scale — and to raise the bar for people. The engineers who thrive will be those who can read data, write a little code, and still explain, in plain language, why a model's suggestion is right — or why it must be ignored.

CYBERSECURITY AWARENESS MONTH

"The biggest shift for cyber security engineers is from reactive firefighting to proactive threat management. Tasks that once soaked up hours—alert triage, reporting, simple forensics and drafting playbooks—are increasingly automated. AI prioritises by context and risk, sketches the blast radius and can trigger approved actions, so engineers focus on architecture, shrinking attack surface and strengthening detection logic. L1/L2 work is shrinking; we're upskilling people to contribute at L3, with the judgement to override automation when business context demands it.

Sharda Tickoo | COUNTRY MANAGER, TREND MICRO, INDIA & SAARC

The new skill set looks different. Cybersecurity analysts and engineers are writing detection-as-code, automating response scripts, and, increasingly, knowing enough data science to question what an AI model tells them. They also need to understand the language of identity and SaaS systems, where so many breaches now begin. But some things don't change. The best analysts still have that almost comically sharp gut instinct: the ability to feel when a login pattern looks off, or when an alert doesn't quite sit right.

Huzefa Motiwala | SENIOR DIRECTOR, TECHNICAL SOLUTIONS, INDIA AND SAARC, PALO ALTO NETWORKS

In today's AI-augmented landscape, cybersecurity professionals require a broader and more advanced skill set to stay relevant. A strong understanding of data analytics and machine learning fundamentals is essential for interpreting AI-driven insights, identifying patterns, and detecting emerging threats. Expertise in cloud and hybrid infrastructure security has also become critical as organisations adopt complex multi-cloud environments.

Balaji Rao | AREA VICE PRESIDENT, INDIA & SAARC, COMMVAULT

Cybersecurity today demands a new kind of agility. Beyond traditional skills like malware analysis and network security, professionals need a solid understanding of AI and machine learning—not just theoretically, but in terms of how these systems detect threats, prioritise alerts, and adapt to evolving attacker tactics. They also need to interpret AI outputs critically; automated alerts can be highly accurate but are not infallible.

Sunil Sharma | VP & MD – SALES (INDIA & SAARC), SOPHOS

Having worked in cybersecurity for over two decades, I've seen the evolution from perimeter-based defense to today's identity-first, zero-trust, AI-augmented security models. This transformation demands a new breed of cybersecurity professionals who are fluent in both security fundamentals and AI. Skills like prompt engineering, securing AI models, using AI-tools in SOC to create a hybrid workforce and governing autonomous agents are becoming essential.

Mandar Kulkarni | NATIONAL SECURITY OFFICER, MICROSOFT INDIA AND SOUTH ASIA

Cybersecurity professionals stand at a critical crossroads as companies transition from digital-first to AI-first strategies. AI has become both their greatest ally and their most formidable threat. As an ally, AI allows security teams to simulate complex threat models at a scale never possible before, helping them anticipate vulnerabilities and strengthen defences proactively. Yet, AI has become a tool for attackers for creating innovative and sophisticated cyberattacks, it's alarmingly easy to get confidential information through well crafted prompts. To stay relevant, cybersecurity professionals must also develop a foundational understanding of machine learning and data science because without it, they can't effectively protect the very intelligence that now powers their organisation

Aparna TA | HEAD, ENTERPRISE IT SOLUTIONS, MANAGEENGINE

Source:Times Of India Newspaper, 15-10-2025
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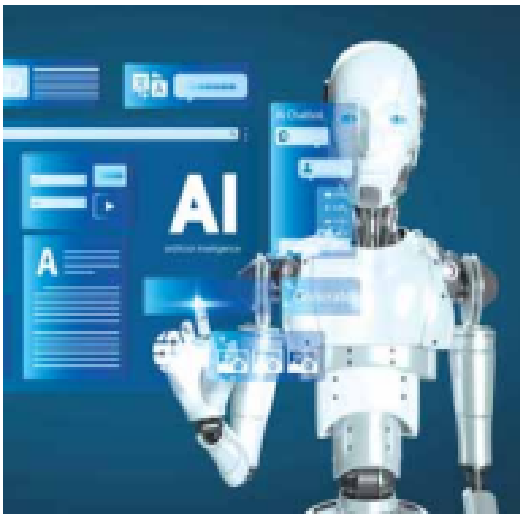
Link:https://drive.google.com/file/d/1Inj22T9WhLPM3FmPKocpC--qnEGOOsuS/view

Four technologies to reshape global labour markets: WEF

PRESS TRUST OF INDIA
New Delhi



Four emerging technologies — AI, robotics, advanced energy systems and sensor networks — are poised to reshape global labour markets with the greatest impact expected in seven core sectors employing 80 per cent of workers worldwide, a study said on Tuesday.

These technologies will create new opportunities to boost productivity and transform jobs in agriculture, manufacturing, construction, wholesale and retail trade, transport and logistics, business and management, and healthcare sectors, the World Economic Forum said in its 'Jobs of Tomorrow: Technology and the Future of the World's Largest Workforces' report.

Unlocking this productivity potential and managing risks will require concerted actions such as mobilising investment capital, accelerating global technology diffusion and ensuring inclusive access, the WEF said.

"The path of technology development will be determined by decisions made now and in the coming years," said Till Leopold, Head of Work, Wages, and Job Creation, WEF.

"Understanding which technologies will be most transformative and how they will transform seven job families that make up almost 80 per cent of the world's workers is crucial to anticipating their impact and driving towards positive outcomes," Leopold said.

While the global debate has focused on desk-based office jobs, the report highlighted how emerging technologies are also driving real-world change beyond such occupations.

Drone technology is already enabling efficient urban deliveries in the United Arab Emirates and for transporting critical supplies – such as medical equipment – to rural Ghana.

Rooftop renewable energy systems in several African countries are stabilising frontline workers' hours, preventing them from being sent home during power cuts, while creating demand for energy system professionals. Energy generation and storage technologies are also transforming the wholesale and retail trade workforce. In South Africa, Nigeria and India, wholesalers are implementing rooftop solar panels and batteries to avoid outages and reduce diesel use, the WEF noted.

This enables jobs to shift towards energy system monitoring, refrigeration management and predictive maintenance, and stabilises hours for frontline staff who used to be sent home during power cuts, it added.

In wholesale and retail trade, the report said AI integration into click-and-collect processes is changing the workforce in Africa, India and Latin America, the WEF said.

The report also showcased how semi-automated construction equipment is reducing physical strain on workers and improving safety. Additionally, robotics combined with AI data processing could redesign the patient journey and the workforce in the healthcare sector, it said.

The study called for tailored collaborative action from employers, governments and technology developers to maximise the benefits of the transformations ahead.

Source:Pioneer Delhi Newspaper, 15-10-2025
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