

INFINITY V8



EDITION

RPM
MAGAZINE



CHRIST
COLLEGE OF ENGINEERING



2025 © ⚠️

DEMO VERSION

DEPARTMENT OF MECHANICAL ENGINEERING

(Accredited by NBA)

The Department of Mechanical Engineering at Christ College of Engineering aims to be a leading knowledge hub in the country, dedicated to producing industry-ready engineers through comprehensive mentoring, training, and top-notch facilities. Our vision is fueled by a commitment to excellence, backed by state-of-the-art infrastructure, industry-standard equipment, and a team of highly qualified faculty members trained in renowned institutes. We prioritize practical learning by offering hands-on experience with design and analysis software like CATIA, ANSYS, CFD, AutoCAD, Onshape, and CNC programming. Our curriculum is designed to equip students with industry-relevant skills, ensuring they are prepared to tackle real-world engineering challenges.

To foster a culture of innovation and leadership, we encourage our students to participate in national and international competitions, hackathons, technical fests, and co-curricular activities. Our flexible program allows students to tailor their education to align with their career aspirations, emphasizing interdisciplinary projects and collaborations.

We have established partnerships with professional bodies like SAE, ASME, and PMI to guide our students in understanding international standards and addressing societal issues. These collaborations, along with our industry-focused labs and MoUs, bridge the gap between academia and industry, ensuring high placement rates and consistent academic success.



At the Department of Mechanical Engineering, we are shaping the future of engineering by nurturing talent, fostering innovation and preparing students to excel in the dynamic world of mechanical engineering.

Real Persistent Mechxians (RPM) emerged from the fervent ambition of the Mechanical Engineering Department to create a unified platform, fostering togetherness by consolidating all cultural and technical endeavors. In its impressive 6-year journey, RPM has blossomed into a well-structured association, setting the pace and securing its distinguished position among the top-ranking entities within our college. The heartbeat of college events, RPM has consistently spearheaded major initiatives, drawing massive crowds and amassing an ardent local fan base. Its magnetic pull extends beyond numbers; RPM has become synonymous with a close-knit community within the Department of Mechanical Engineering, nurturing an inviting and familial atmosphere. At the epicenter of RPM's meteoric rise stands Maschinen Fest, an annual extravaganza that epitomizes the association's essence – a dynamic fusion of creativity, innovation, and collective wisdom showcased within the captivating world of mechanical engineering.



Rev. Fr. John Paliakara CMI **Executive Director**

At the very outset let me congratulate the Department of Mechanical Engineering for getting accredited by the National Board of Accreditation (NBA) with a score of 665. It is indeed a momentous achievement which will act as a catalyst for the next phase of development that this department needs to undergo. I look forward to an exciting and at the same time challenging future and I have the strong belief that the Mechanical Engineering Department will be focused on providing the best exposure to its students which in turn will ensure that the students turn out to be competent and confident professionals.



I am happy to note that our Mechanical Engineering students are excelling in SAE national level competitions, but it is a bit disappointing that these opportunities are not translating into internships or job offers. The Part-time job challenge is again a novel initiative from this department and I hope that such initiatives meet their intended results. I extend my wishes to all the readers of this magazine. May the Mechanical Engineering students turn out to be as vibrant as the pages of this magazine.

Rev. Fr. Milner Paul CMI **Joint Director**



I am happy to know that mechanical department of Christ College of Engineering is bring forth the magazine "Infinity 8.0". It portrays students activity based learnings, out reach programmes, artistic productions and so on and so forth. It certainly fosters their creative space and they may be more productive and progressive to be a contributors to this society. I also congratulate all the creative heads and all committee members who has actualized it.

Wish you all the sucess. May God bless you.

Rev. Fr. Jojo Arikkadan

Finance Director

Get Ready for the Ride! Mechanical Engineering at Christ College of Engineering is set to rock your world in the 10th Edition of the department magazine INFINITY, brought to you by the Department Association, B.M. We're not just pushing boundaries; we're redefining the game with cutting-edge ideas and revolutionary thinking.

Envision a blend of technical brilliance and imagination, where gears aren't just parts; they are the architects of a new age. The team of faculty and students is on a mission to reshape innovation, turning challenges into our playground.

Gear up for an exhilarating tour of Christ College of Engineering, where Mechanical Engineering meets the future in the most attractive, captivating, and relevant way possible through INFINITY.



Dr. Sajeew John

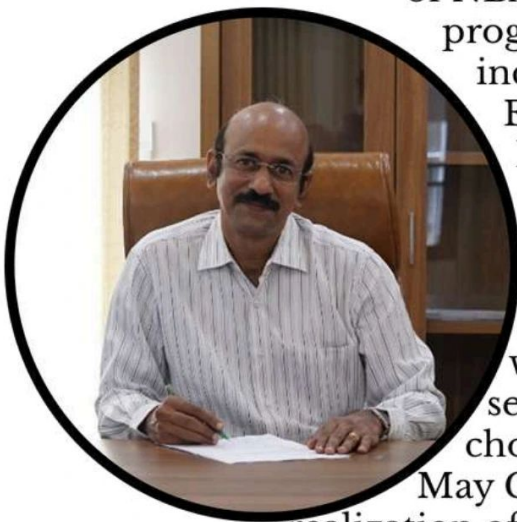
Principal

It is really a matter of pride to pen a few words for this issue of the Mechanical Engineering Departmental Magazine. This effort of the budding Mechanical Engineers comes immediately after the achievement of NBA Accreditation for all the 5 undergraduate programmes of Christ College of Engineering, including the Department of Mechanical Engineering.

Along with the Staff, many students have contributed to this success story. I express my sincere appreciation for all the staff members, students and alumni of this department on this momentous achievement. Along with the Faculty members and staff, I too wish to see all the students blossoming into seasoned and tenured professionals in their chosen career path after they graduate from CCE.

May God Almighty bless all your efforts in the realization of this dream. May this department continue to march ahead with new initiatives that will make the student community to improve and grow together.

My best wishes for this magazine and my congratulations to everyone behind this venture. My heart also goes out to those who contributed towards this magazine.



Dr. John V. D. **Vice Principal**

I am happy to note that the Department of Mechanical Engineering is releasing the 8th edition of its Annual Department Magazine - Infinity. At the outset, my congratulations to the department on getting NBA Accreditation. The time and effort put in to achieve this accreditation is huge. May this department continue to blossom under the able leadership and guidance of all departmental faculty members. Enriching and enlightening the students with the relevant knowledge and skill set is one of the strengths of this department. I am sure that with the excellent academic environment in place here, the faculty members will be able to inspire the students to develop their technical skills and inculcate the spirit of team work in them. I hope that this magazine will be a catalyst in the realization of this goal. Best Wishes!!!



Dr. Manoj George **Director (Academics)**

I am thrilled to witness the launch of the Mechanical Engineering Students Magazine. This endeavor showcases the dedication, passion, and exceptional talents within our mechanical engineering community. The magazine's focus on achievements, insights, and creative endeavors emphasizes the importance of technical writing in our field. Effective communication is integral to engineering, and this platform provides a valuable opportunity for students to hone their skills. It's not just about articles; it's a canvas for expressing creativity and sharing experiences. I commend the magazine team for their hard work and look forward to exploring the rich content that reflects our collective brilliance and innovative spirit.



Dr Sijo M T

HOD ME



I am delighted to extend my heartfelt congratulations to the entire team on the successful publication of the eighth edition of our technical magazine, INFINITY. This achievement is a testament to the hard work, dedication, and passion that our department embodies. The latest edition reflects the creativity, knowledge, and expertise of our community in mechanical engineering, contributing significantly to the academic realm. Your commitment to excellence sets a remarkable example for all. I am proud of each one of you for your contributions and efforts. Let's continue to inspire and pave the way for future successes, making our institution proud. Congratulations once again, and let's look forward to more achievements ahead!

Nithin V K

Staff Editor

I am excited to be a part of our very own Mechanical Engineering Department magazine, Infinity 8.0, showcasing the incredible talent, innovation, and achievements within our department.

The magazine will surely serve as a platform to highlight the diverse range of research endeavors, project successes, student accomplishments, and faculty expertise that define our community. Through this publication, we aim to foster collaboration, inspire creativity, and celebrate the contributions of each member of our department.

We believe that every story, every project, and every idea has the power to inspire and educate.

Whether you're a seasoned researcher, a budding engineer, or a passionate student, your voice matters, and we have tried to amplify it through our magazine.

Congratulations to the student team for creating vibrant and engaging publication that reflects the spirit of excellence and innovation that defines our Mechanical Engineering Department. Thank you team for your enthusiasm and support on this exciting endeavor.



Joseph John E

Magazine Head



Infinity 8.0 is more than just a magazine—it's a reflection of our passion, dedication, and the relentless pursuit of excellence in mechanical engineering.

I am incredibly proud of the talent and hard work that has gone into this edition. Every article, design, and idea is a testament to the creativity and innovation of our team. The unwavering support of our faculty has been the backbone of this journey, guiding us through challenges and pushing us to reach new heights.

The RPM Association stands strong because of the dedication of every individual who dared to think differently, challenge norms, and turn ideas into reality.

Infinity 8.0 is not just a publication—it's a movement, a celebration of our collective spirit. Let's keep learning, creating, and shaping the future—one page at a time!

Ashiya Jose

Chief Editor

Infinity 8.0 celebrates the relentless efforts of our talented members and the unwavering support of our faculty. Each contribution—big or small—has fueled innovation, creativity, and excellence in mechanical engineering. The RPM Association takes pride in the dedication shown by every individual in pushing boundaries and turning ideas into reality. Behind every achievement lies the guidance of our esteemed faculty, whose mentorship has been invaluable. Together, we've transformed challenges into opportunities, fostering a culture of collaboration and growth. This edition is a testament to our shared passion and hard work. Let's continue inspiring, learning, and engineering the future!



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VISION

To become a recognised knowledge hub in Mechanical Engineering by moulding professionally competent and socially responsible engineers.

MISSION

- To create a conducive learning platform for students to excel as professionals, through quality technical education and training.
- To involve students in socially committed projects and programs to broaden their knowledge and integrity.
- To mould students with good leadership qualities, ethical values and life-long learning.





PROGRAMME SPECIFIC OUTCOMES (PSO)

- Apply the knowledge of thermal sciences, mechanical design, and manufacturing principles for analysing and evaluating problems in the domain of Mechanical Engineering.
- Apply the knowledge gained through multidisciplinary learning, to solve real life problems.
- Effectively use modern technology tools such as CFD, CAD/CAM and 3-D printing in Mechanical Engineering practice.

PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

- Apply technical knowledge and skills to find feasible solutions in Mechanical Engineering domains and allied industries.
- Evolve as responsible professionals capable of solving socially relevant problems and pursue higher education and research.
- Exhibit professionalism, team work, and ethical attitude through continued learning to accomplish organisational goals.

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EVOLUTION OF AN 225 MRIYA

In the world of aviation, few aircraft have captured the imagination of engineers and enthusiasts like the Antonov An-225 Mriya (Ukrainian for "Dream"). Designed in the 1980s as a solution to an extraordinary challenge, the An-225 remains the largest and heaviest aircraft ever built. Its evolution is a testament to human ingenuity, pushing the boundaries of aerodynamics, materials science, and mechanical engineering.

Here we explore An-225's journey and its achievements—from its Cold War origins to its role in modern cargo transport—and examines the engineering marvels that made it possible. The An-225 was conceived during the Soviet space race, specifically to transport the Buran space shuttle, the USSR's answer to NASA's Space Shuttle.

Traditional transport methods were insufficient for such a massive payload, so the Antonov Design Bureau, led by chief designer Viktor Tolmachev, was tasked with creating an aircraft unlike any other.

The An-225 was derived from the smaller An-124 Ruslan but scaled up dramatically. The key modifications included were Six Progress D-18T turbofan engines (instead of four) to provide the necessary thrust. An extended fuselage to accommodate oversized cargo and a wingspan of 88.4 meters surpassing any other aircraft.



A reinforced landing gear system with 32 wheels to distribute its enormous weight. A twin-tail design to stabilize airflow when carrying external loads like the Buran.

The first An-225 took flight on December 21, 1988, proving that even the most ambitious engineering dreams could take wing. The An-225's six turbofan engines each produced 51,600 lbf of thrust, allowing a maximum takeoff weight of 640 metric tons—more than a fully loaded Boeing 747.

The Story Behind the Number 225

According to notes the An-225 received its numeric designation in the 1980s from Soviet aerospace engineers, who envisioned a reusable space transport system that would enable horizontal, suborbital launches instead of traditional, vertical lift-offs from the ground. Mriya was initially conceptualized as an in-flight launch platform for the Soviet space shuttle. To accomplish that, engineers estimated the jet's maximum payload capacity would have to be 225 tons to carry a spacecraft and its external fuel tank—hence the An-225.



Mriya was the first Soviet aircraft to feature “power-by-wire controls with no mechanical linkages between the throttle levers and the engines.”

A Unique Set of Attributes

It served as a carrier for the Soviet space shuttle, Buran.

It set 240 world and national records for speed, altitude and height-to-altitude.

It set six world records for flying heavy cargo (four pipe-laying machines weighing 247 tons) from Prague to Uzbekistan.

It set a record for flying the longest cargo (two 42-meter [138-foot] wind turbine blades) from China to Denmark.

An Engineering Marvel

Aerospace designers balanced fuel efficiency and reliability, a crucial feat for an aircraft of such immense scale. Its high-mounted, 88.4-meter wingspan was reinforced with advanced materials and strengthened spars to withstand extreme stress. The triple-redundant hydraulic and electrical systems ensured seamless operation, while the 32-wheel landing gear evenly distributed its colossal weight, enabling landings on diverse terrains.



What truly set the An-225 apart was its unmatched versatility—it could transport external payloads like the Buran space shuttle, a capability no other aircraft could match. Additionally, its over-the-nose loading ramp allowed for efficient cargo handling, making it indispensable for disaster relief missions in remote and underdeveloped areas.

The Fame and Its Fanbase

The Antonov An-225 Mriya was not just admired by aviation enthusiasts; it had a global cult following. Plane spotters and aircraft lovers worldwide would eagerly track its movements, often gathering at airports just to witness its awe-inspiring takeoffs and landings. Each mission was a spectacle, drawing large crowds who marveled at its sheer size and power.

The An-225 wasn't just a plane—it was an aviation legend, inspiring generations of engineers, pilots, and aircraft enthusiasts. More than just an aircraft, it stood as a testament to the power of mechanical engineering, proving what's possible when ambition meets innovation.



In the rapidly evolving world of artificial intelligence, OpenAI has emerged as a leader in innovation, research, and ethical AI development.

Founded with the vision of ensuring that AI benefits all of humanity, OpenAI has pushed the boundaries of what machines can achieve. From natural language processing to advanced problem-solving, its groundbreaking models have transformed industries, redefining how humans interact with technology.

One of OpenAI's most significant contributions is its development of powerful language models, including ChatGPT. These AI systems have always revolutionized communication, enabling businesses, educators, and creatives to automate tasks, enhance productivity, and generate human-like text with remarkable accuracy. Beyond text-based AI, OpenAI has also made advancements in robotics, code generation, and image synthesis, paving the way for a future where AI seamlessly integrates into daily life.

Despite its achievements, OpenAI remains committed to ethical AI development, prioritizing the utmost safety, transparency, and responsible usage. The organization is actively researching different ways to mitigate AI risks, ensuring that its technology is aligned with human values. By collaborating with policymakers, researchers, and global institutions, OpenAI aims to create guidelines that prevent misuse while maximizing the positive impact of AI.

As AI continues to evolve, OpenAI's role in shaping the future remains crucial. With the ongoing research in Artificial general intelligence (AGI), the organization is striving towards AI systems that can reason, learn, and adapt across various fields. By maintaining a balance between innovation and responsibility, OpenAI is not only advancing the AI capabilities but also ensuring that these advancements do serve humanity in the best possible way.

OpenAI. Shaping the Future of AI

"Building advanced AI is like launching a rocket. The first challenge is to maximize acceleration, but once it starts picking up speed, you also need to focus on steering."

- Jaan Tallinn





NON DESTRUCTIVE TESTING

ENSURING SAFETY WITHOUT COMPROMISE

Non-Destructive Testing (NDT) represents a crucial branch of engineering that allows for the inspection and evaluation of materials, components, and structures without causing damage. Unlike traditional testing methods that may require cutting, breaking, or altering a sample, NDT techniques provide critical information about material integrity while preserving the object's usability. These methods are indispensable across industries such as aerospace, automotive, construction, and manufacturing where safety and reliability are paramount. By detecting flaws, cracks, corrosion or weaknesses early, NDT helps prevent catastrophic failures, reduces downtime, and extends the lifespan of critical infrastructure.

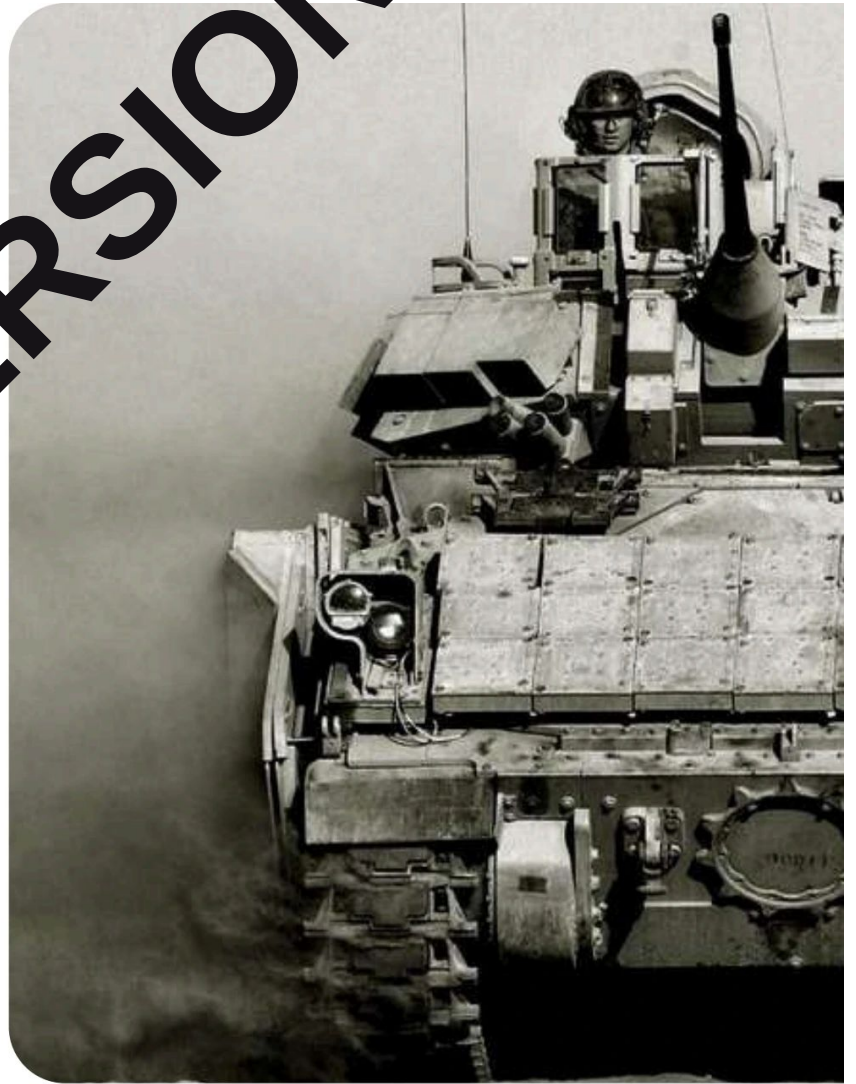
One of the most widely used NDT methods is Ultrasonic Testing (UT), which employs high-frequency sound waves to detect internal defects or measure material thickness. A transducer sends ultrasonic pulses into the material and the reflected waves are analyzed to identify inconsistencies. UT is particularly valuable in inspecting welds, pipelines, and aircraft components, where hidden flaws could lead to structural failures. Another key technique is Radiographic Testing (RT), which uses X-rays or gamma rays to produce images of a material's internal structure. Similar to medical X-rays, RT reveals voids, cracks or inclusions in metals, composites and welds making it essential in power plants, refineries and aerospace manufacturing.



Surface-level defects are effectively identified through Liquid Penetrant Testing (PT) and Magnetic Particle Testing (MT). PT involves applying a colored or fluorescent dye to a clean surface, which seeps into surface-breaking cracks. After removing excess penetrant, a developer is applied to draw out the trapped dye, highlighting defects under visible or ultraviolet light. This method is commonly used in automotive and aerospace industries for inspecting turbine blades and engine parts. On the other hand, MT is used for ferromagnetic materials, where a magnetic field is applied and iron particles are spread over the surface. Any disruption in the magnetic field caused by a defect attracts the particles forming a visible indication. MT is extensively used in structural steel inspections, pressure vessels and railway components.

Advanced NDT methods continue to enhance inspection accuracy and efficiency. Eddy Current Testing (ECT) uses electromagnetic induction to detect surface and near-surface flaws in conductive materials making it ideal for inspecting aircraft skins and heat exchanger tubes. Thermographic Testing (IRT), which measures infrared radiation to identify temperature variations helps detect delamination in composites and insulation defects in electrical systems. As industries demand higher precision and faster inspections, NDT techniques evolve with automation, robotics and artificial intelligence integration. Whether ensuring the safety of a bridge, the reliability of an aircraft or the durability of an oil pipeline, NDT remains an indispensable tool in maintaining structural integrity without compromise.

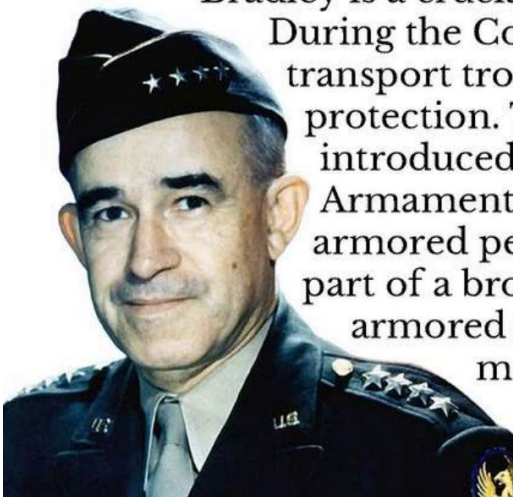
Bradley: The U.S. Army's Armoured Titan

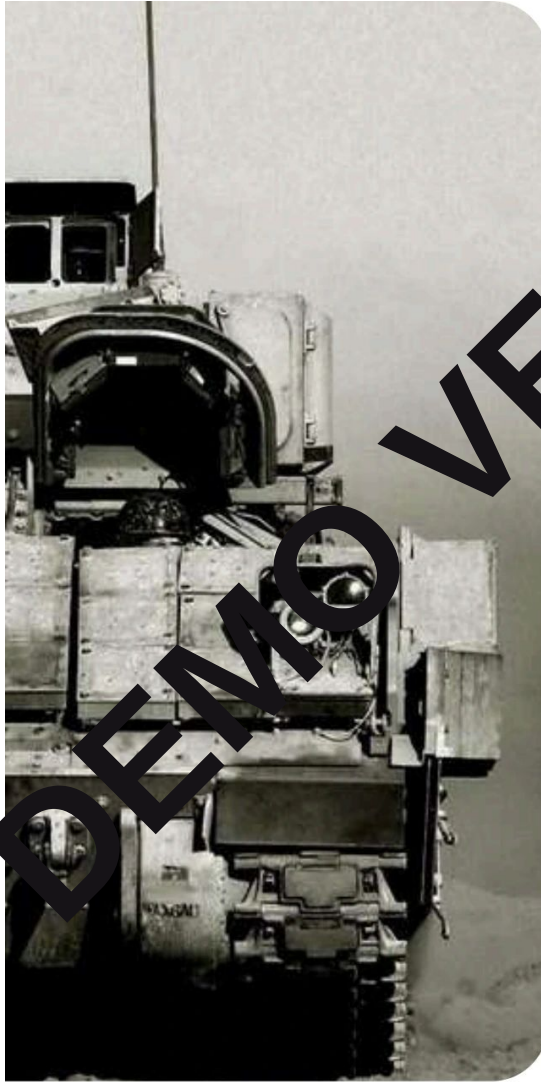


The Bradley Fighting Vehicle (BFV) is a powerful, armored fighting vehicle used by the United States Army for troop transport and combat support. It is named after General Omar Bradley and has been in service since the 1980s. Designed to transport infantry while providing covering fire, the

Bradley is a crucial component of modern U.S. military operations.

During the Cold War, the U.S. Army sought a vehicle that could transport troops while maintaining superior firepower and protection. The result was the Bradley Fighting Vehicle, first introduced in 1981. Developed by BAE Systems Land & Armaments, it was designed to replace the aging M113 armored personnel carrier. The Bradley was developed as part of a broader initiative to modernize the U.S. Army's armored forces. Its introduction marked a shift towards mechanized infantry, allowing for greater mobility and battlefield effectiveness.





The BFV boasts formidable firepower, including a 25mm M242 Bushmaster chain gun, TOW anti-tank missiles, and a 7.62mm coaxial machine gun, all supported by advanced targeting optics for increased combat accuracy.

It features durable armor made of aluminum alloy with additional steel plating, with some variants including Explosive Reactive Armor (ERA) for enhanced protection against RPGs and missiles, along with a Nuclear, Biological, and Chemical (NBC) filtration system. Powered by a Cummins VTA-903T 600 hp diesel engine, it can reach speeds of approximately 41 mph (66 km/h) on roads, with a range of around 300 miles (483 km) per tank, and early models had amphibious capabilities using inflatable panels. The Bradley comes in multiple variants, including the M2 Bradley Infantry Fighting Vehicle (IFV) designed for infantry transport and combat support, the M3 Bradley Cavalry Fighting Vehicle (CFV) used for reconnaissance and scouting, the M6 Linebacker equipped with an FIM-92 Stinger missile system for air defense, and the Bradley Fire Support Vehicle (B-FiST) modified for artillery support and target acquisition.

The BFV has seen extensive combat deployment, playing a critical role in the Gulf War (1991), where it outperformed Soviet-era tanks and provided crucial fire support, the Iraq War (2003-2011), where it was used in urban combat and convoy protection with upgraded armor to counter IED threats, and in the Afghanistan War, where it supported mechanized infantry operations. Mechanically, the BFV is powered by a Cummins VTA-903T diesel engine that delivers 600 horsepower, ensuring optimal performance in rugged terrains and long missions, and is paired with a General Dynamics HMPT-500 hydromechanical automatic transmission system that features three forward gears and one reverse gear for smooth shifting and maneuverability. It utilizes a torsion bar suspension system with hydraulic dampers and reinforced road wheels to absorb shocks from rough terrains, ensuring stability and reducing crew fatigue.



The tracked mobility system includes metal-reinforced rubber pads for improved traction on various surfaces such as mud, sand, and rocky terrains, while its design distributes weight efficiently to minimize ground pressure and prevent getting stuck.

The U.S. Army is exploring future upgrades and potential replacements through the Optionally Manned Fighting Vehicle (OMFV) program, aimed at developing a next-generation combat vehicle with improved mobility, protection, and firepower, but until then, the Bradley remains a cornerstone of the Army's mechanized forces.

With continuous upgrades and modifications, the Bradley Fighting Vehicle remains a vital asset for the U.S.

Army, providing essential

combat support and infantry protection in modern warfare while discussions about its replacement continue, ensuring its relevance in military operations worldwide.

The BFV's cooling system, featuring radiators and fans, regulates engine temperature, while its exhaust system minimizes heat signatures to reduce detection by enemy forces. Additionally, its modern electrical system powers communications, navigation, and targeting subsystems, and its advanced sensors and infrared cameras enhance battlefield awareness for a tactical advantage.

"To win we need a fighting vehicle, not a battlefield taxi." – General Donn A. Starry





1917: Albert Einstein established the theoretical foundations for the laser and maser.

1958: Charles Townes and Arthur Schawlow proposed the laser concept.

1958: Charles Townes and Arthur Schawlow proposed the laser concept.

LASER

Micromachining

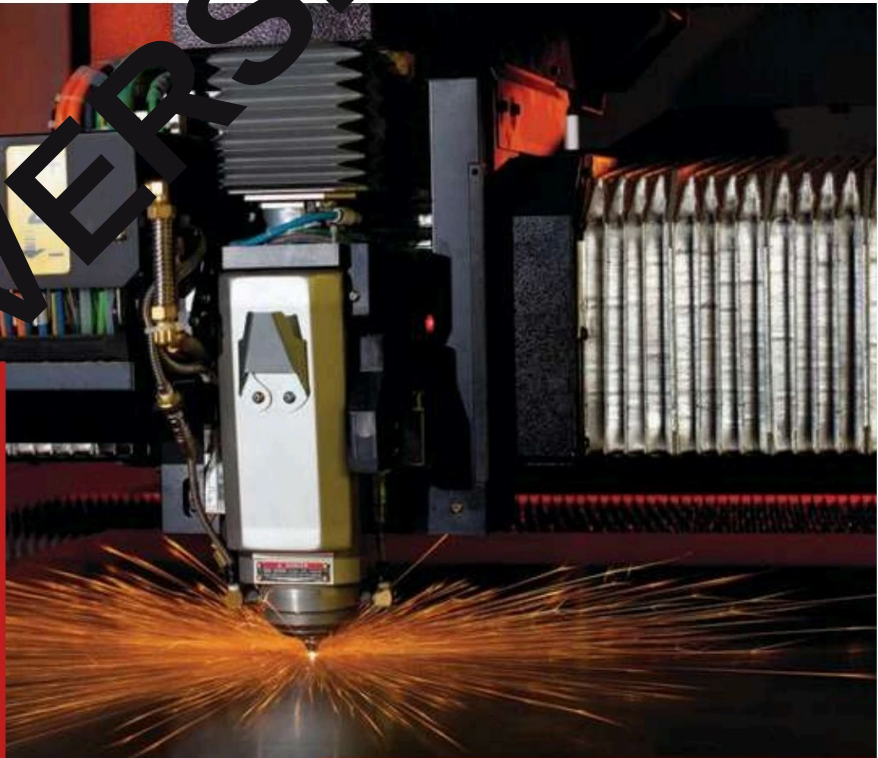
Laser micromachining has emerged as a transformative technology in advanced manufacturing, enabling unparalleled precision in material processing at microscopic levels. By using highly focused laser beams, this technique can cut, drill, engrave, or modify materials with micron-level accuracy, making it indispensable in industries ranging from electronics to medical devices. Unlike traditional mechanical methods, laser micromachining is non-contact, reducing material stress and contamination while achieving intricate geometries impossible with conventional tools. As industries demand smaller, more complex components, laser micromachining is poised to play an even greater role in shaping the future of micro-engineering.



DEMO VERSION



The first practical demonstration of a laser, paving the way for laser cutting, was by Theodore Maiman in 1960,



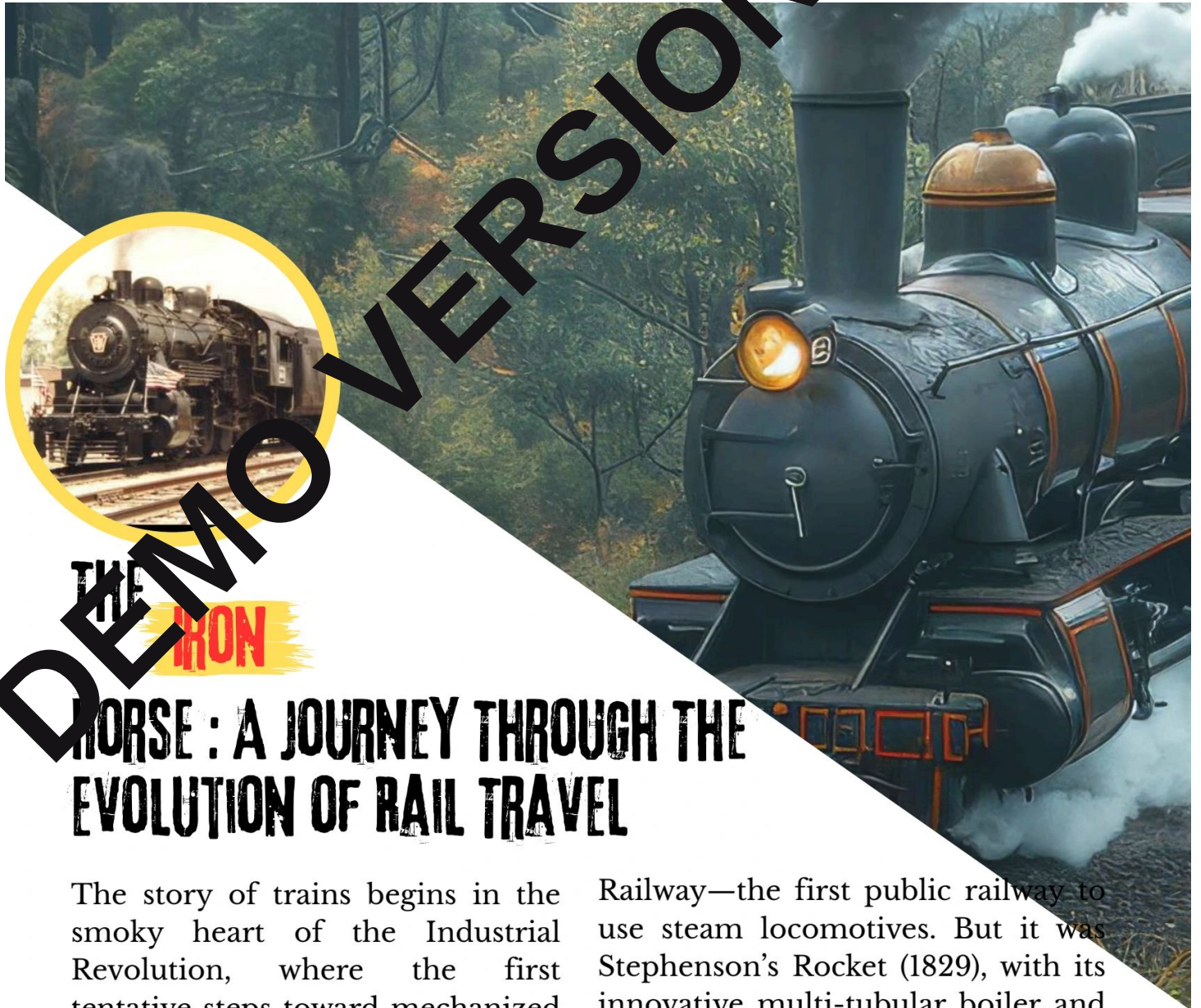
One of the most promising areas for laser micromachining is in the electronics industry, where the push for miniaturization continues unabated. The technology enables the production of ultra-fine circuit traces, micro-vias in printed circuit boards (PCBs), and precise cutting of flexible electronics. With the rise of 5G, IoT, and wearable devices, manufacturers require even finer features and higher throughput, driving advancements in ultrafast lasers like femtosecond and picosecond systems. These lasers minimize heat-affected zones, allowing for cleaner cuts in delicate materials such as polymers and thin metals. As electronic components shrink further, laser micromachining will become the backbone of next-generation device fabrication.





The medical and biotechnology sectors also stand to benefit immensely from advancements in laser micromachining. The technology is already used to manufacture stents, catheters, and microfluidic devices with sub-micron precision. In the future, it could enable breakthroughs in biodegradable implants, lab-on-a-chip diagnostic tools, and even targeted drug delivery systems. Femtosecond lasers, in particular, are being explored for high-precision surgeries and tissue engineering, where minimal collateral damage is critical. As personalized medicine and minimally invasive procedures gain traction, laser micromachining will be instrumental in creating customized, microscale medical solutions that improve patient outcomes.

Looking ahead, the integration of artificial intelligence (AI) and automation will further revolutionize laser micromachining. AI-driven adaptive control systems can optimize laser parameters in real-time, compensating for material inconsistencies and improving process repeatability. Meanwhile, advancements in beam shaping and multi-axis laser systems will expand the range of applications, from aerospace components to photonics and quantum computing. As sustainability becomes a priority, laser micromachining's ability to reduce material waste and energy consumption will make it a key player in green manufacturing. With continuous innovations in laser sources, optics, and software, the future of laser micromachining promises not just microscopic precision, but macroscopic impact across industries.

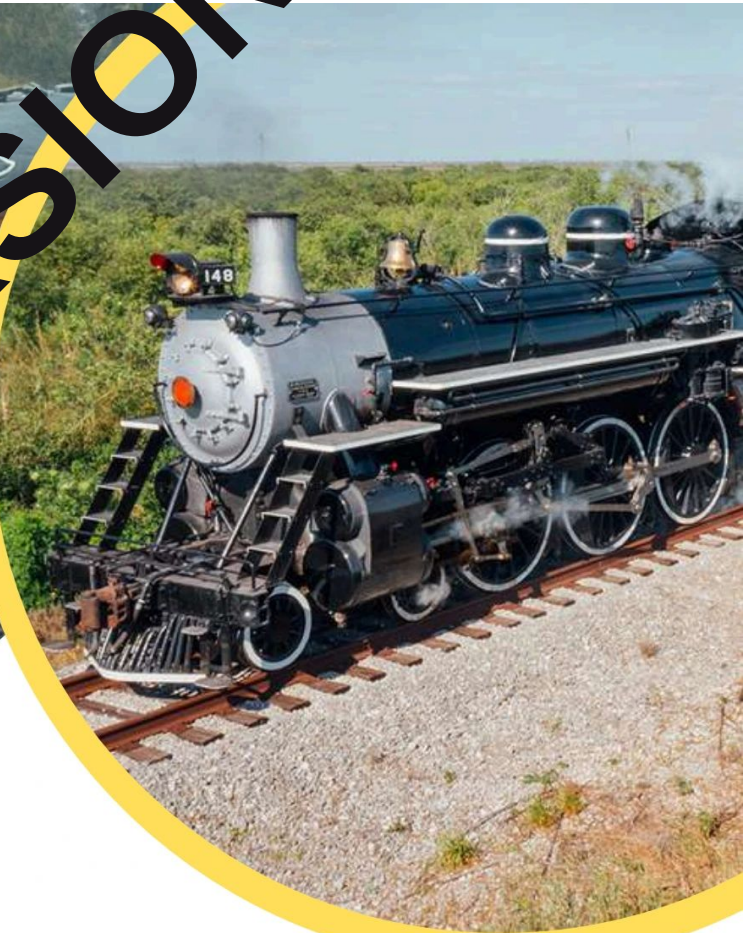


THE IRON

HORSE : A JOURNEY THROUGH THE EVOLUTION OF RAIL TRAVEL

The story of trains begins in the smoky heart of the Industrial Revolution, where the first tentative steps toward mechanized transport were taken. In 1804, Cornish engineer Richard Trevithick unveiled the world's first steam locomotive, hauling 10 tons of iron along a tramway in Wales. Though primitive, this machine proved that steam-powered rail transport was possible. The real breakthrough came in 1825 with George Stephenson's Locomotion No. 1, which pulled the inaugural train on the Stockton and Darlington

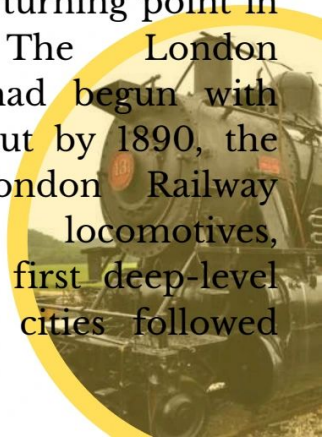
Railway—the first public railway to use steam locomotives. But it was Stephenson's Rocket (1829), with its innovative multi-tubular boiler and blast pipe, that truly revolutionized rail travel. Capable of reaching 29 mph during the Rainhill Trials, it set the template for all future steam engines. Soon, legendary locomotives like the GWR Iron Duke (1847) and the Flying Scotsman (1923) pushed speeds past 100 mph, while American behemoths like the Union Pacific Big Boy (1941) demonstrated raw power, hauling freight over the Rocky Mountains with ease.



As the 19th century progressed, railways expanded across continents, transforming societies and economies. Britain's London and Birmingham Railway (1838) became the first major intercity line, while the Transcontinental Railroad (1869) in the United States connected the Atlantic and Pacific coasts, shrinking a cross-country journey from months to days. In Europe, luxury expresses like the Orient Express (1883) redefined long-distance travel with opulent sleeping cars and fine dining. Meanwhile, steam technology reached its zenith with record-breaking locomotives such as the LNER Class

A4 (1935), epitomized by Mallard, which still holds the world steam speed record at 126 mph. Yet, even as steam dominated, a new era was dawning—one powered by electricity and diesel, promising cleaner, faster, and more efficient travel.

The rise of electric traction in the late 19th century marked a turning point in urban transport. The London Underground (1863) had begun with steam-hauled trains, but by 1890, the City and South London Railway introduced electric locomotives, making it the world's first deep-level electric metro. Other cities followed swiftly:



DEMO VERSION



“Rocket as preserved in the Science Museum, London”

Budapest's Millennium Underground (1896) became the first electrified subway in continental Europe, while New York's Interborough Rapid Transit (1904) showcased the potential of high-capacity urban rail. By the mid-20th century, metros had evolved into sophisticated networks, with innovations like automatic signaling and regenerative braking. Today, fully automated systems like Dubai's Red Line (2009) and Singapore's Downtown Line (2017) operate without drivers, while futuristic designs such as the Copenhagen Metro (2019) feature sleek, energy-efficient trains running on 100% renewable power.

Beyond city limits, diesel and electric locomotives revolutionized mainline rail travel. The Pioneer Zephyr (1934), a streamlined diesel-electric train, showcased the potential of internal combustion with its record-breaking "Dawn to Dusk" run from Denver to Chicago. Meanwhile, electric traction enabled high-speed rail to flourish—nowhere more spectacularly than in Japan, where the Shinkansen (1964) debuted just in time for the Tokyo Olympics. Dubbed the "bullet train," its 0 Series reached 130 mph, setting a new global standard. Europe followed suit with France's TGV (1981) and Germany's ICE (1991), while China's CRH network (2007) became the world's largest high-speed rail system.

DEMO VERSION



Today, trains like the TGV Duplex and Shinkansen E5 Series cruise at 200 mph, with maglev prototypes like Japan's L0 Series (2015) pushing boundaries at 375 mph.

Perhaps the most audacious rail projects have been those conquering natural barriers—particularly underwater tunnels. The Thames Tunnel (1843), designed by Marc Brunel, was the first to pass beneath a navigable river, though it initially served pedestrians. A century later, the Seikan Tunnel (1988) in Japan became the world's longest undersea rail tunnel at 33.5 miles, linking Honshu and Hokkaido. But the crowning achievement came with the Channel Tunnel (1994), where Eurostar's Class 373 trains sped beneath the English Channel at 186 mph, seamlessly connecting London to Paris. More recently, India's Kolkata Metro (2023) introduced the country's first underwater section, while China's Hong Kong-Zhuhai-Macau Bridge (2018) incorporated a submerged rail link as part of the world's longest sea crossing. These feats of engineering exemplify humanity's relentless drive to overcome geographical limits.

As we look to the future, rail technology continues to break new ground. Magnetic levitation, once a futuristic dream, is now a reality with Shanghai's Transrapid (2004) and Japan's Chuo Shinkansen (projected 2027), which aims for 311 mph commercial speeds. Hyperloop concepts promise even greater velocities, while hydrogen-powered trains like Germany's Coradia iLint (2018) offer zero-emission alternatives. From the clattering steam engines of the 1800s to the silent glide of maglevs, trains have continually reshaped our world—not just as machines of transport, but as symbols of progress. The iron horse, born in fire and steam, now races toward a new horizon, where speed, sustainability, and innovation converge.



The Invisible Web:

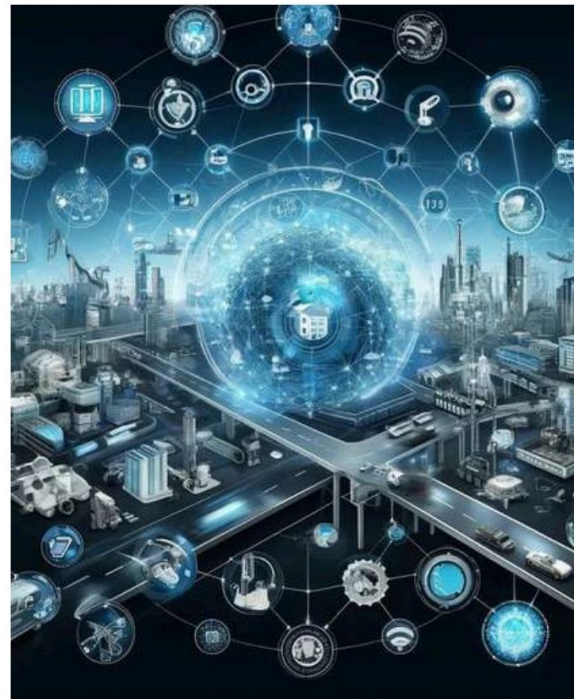
How IoT is Transforming Our World

It was a chilly evening when Arjun returned home from work, exhausted and longing for a warm cup of tea. As he stepped onto his porch, the smart sensor detected his presence, automatically unlocking the door. The lights adjusted to his preferred setting, and the thermostat warmed the room to a cozy temperature. Just as he sank into his couch, his virtual assistant reminded him of an upcoming meeting, while the kettle in the kitchen started boiling water for his tea. Arjun smiled—his house knew him well. This was no science fiction; this was the Internet of Things (IoT) in action.



The Internet of Things, or IoT, refers to a vast network of interconnected devices that communicate with each other to enhance our daily lives. From smart homes to industrial automation, IoT has become a silent force, shaping the way we live and work. By embedding sensors and software into everyday objects, IoT enables real-time data collection and intelligent decision-making. It powers everything from fitness trackers that monitor our health to traffic management systems that ease congestion in crowded cities. The possibilities are endless, and the technology is evolving at an astonishing pace.

Industries across the world are embracing IoT to optimize efficiency and productivity. In manufacturing, IoT-powered predictive maintenance helps prevent machinery failures, reducing downtime and costs. In agriculture, smart irrigation systems ensure crops receive the right amount of water based on weather forecasts and soil conditions. Healthcare, too, has seen remarkable transformations, with wearable devices tracking vital signs and alerting doctors in case of anomalies. As businesses integrate IoT into their operations, they unlock new opportunities for growth, innovation, and sustainability.





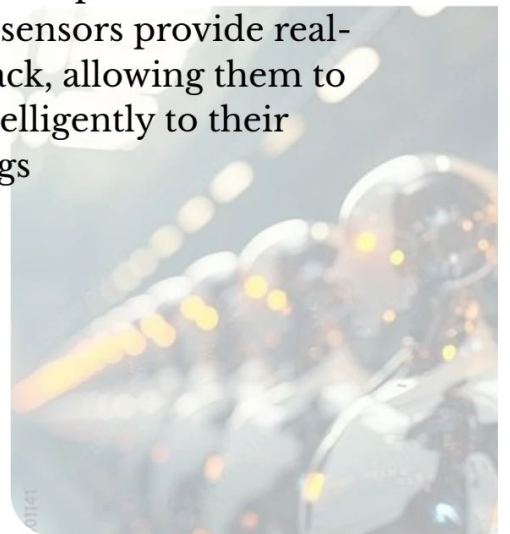
However, with great power comes great responsibility. The growing network of IoT devices also brings challenges, particularly in security and privacy. Cyberattacks on connected systems can lead to data breaches, while poorly secured devices may be exploited by hackers. Addressing these concerns requires robust cybersecurity measures, ethical data governance, and regulations that balance innovation with safety. As we step into an era of hyper-connectivity, ensuring the responsible use of IoT is crucial for a smarter and safer future.

The world of IoT is vast and still unfolding, promising a future where intelligence is woven into the fabric of our surroundings. Whether in our homes, workplaces, or cities, IoT is quietly revolutionizing the way we interact with technology. As we continue to innovate, the question is not whether IoT will change our world—it already has. The real challenge is how we harness its potential responsibly, ensuring that this invisible web of connectivity serves humanity in the best possible way.

SOFT ROBOTICS

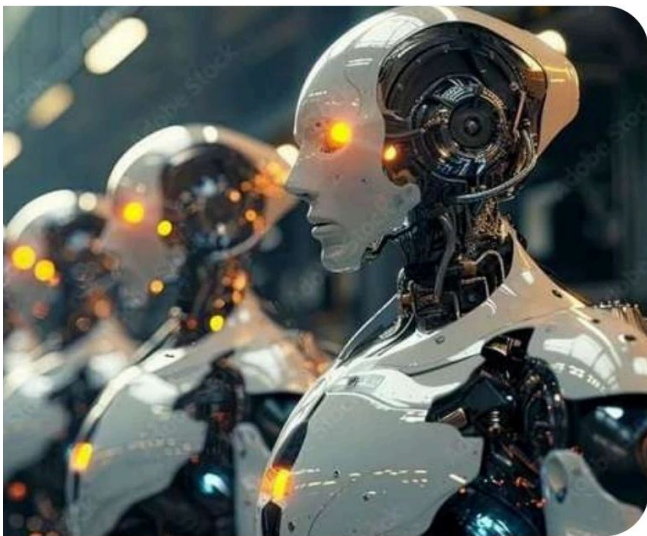
Soft robotics is transforming the field of automation by using flexible, deformable materials instead of rigid components. Inspired by nature, these robots mimic biological organisms like octopuses and human muscles, enabling them to perform delicate tasks, navigate unpredictable environments, and safely interact with humans.

Unlike traditional robots, soft robots use innovative actuation methods, such as pneumatic or hydraulic systems, electroactive polymers, and magnetically responsive materials, to achieve smooth and adaptable movements. Embedded sensors provide real-time feedback, allowing them to respond intelligently to their surroundings



Soft robotics is making a significant impact across multiple industries. In healthcare, soft robotic hands assist in minimally invasive surgery, and wearable exosuits help patients recover mobility. In manufacturing, they handle fragile items with precision, reducing waste and improving efficiency. Agriculture benefits from soft robotic grippers that gently harvest crops, while space exploration sees potential in flexible robots for navigating challenging terrains.

With advancements in materials science and AI integration, soft robotics is set to redefine automation. By combining adaptability, safety, and efficiency, these robots offer a promising future where machines can seamlessly collaborate with humans in diverse environments.



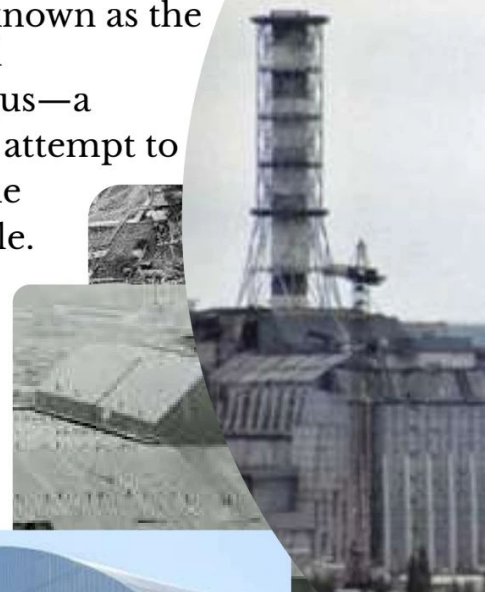
CHERNOBYL SARCOPHAGUS

The Chernobyl Nuclear Power Plant disaster on April 26, 1986, remains one of the most catastrophic nuclear accidents in history. When Reactor No. 4 exploded, it released an immense amount of radioactive material into the environment, posing an immediate and long-term threat to human life and the ecosystem.

In the chaotic aftermath, Soviet authorities scrambled to contain the disaster. Firefighters and plant workers—many of whom would later succumb to radiation sickness—risked their lives to control the initial fires. Helicopters dropped sand, lead, and boron in an attempt to suppress the flames and absorb some of the radiation. However, these efforts could do little to halt the continuous release of radioactive particles into the air.

As radiation spread across Ukraine, Belarus, and beyond, entire cities were evacuated. Thousands of workers were sent to the disaster site to prevent further catastrophe. It quickly became evident that only one option remained: the ruined reactor had to be sealed off completely.

Thus began the frantic effort to construct what would become known as the Chernobyl Sarcophagus—a desperate attempt to contain the unthinkable.



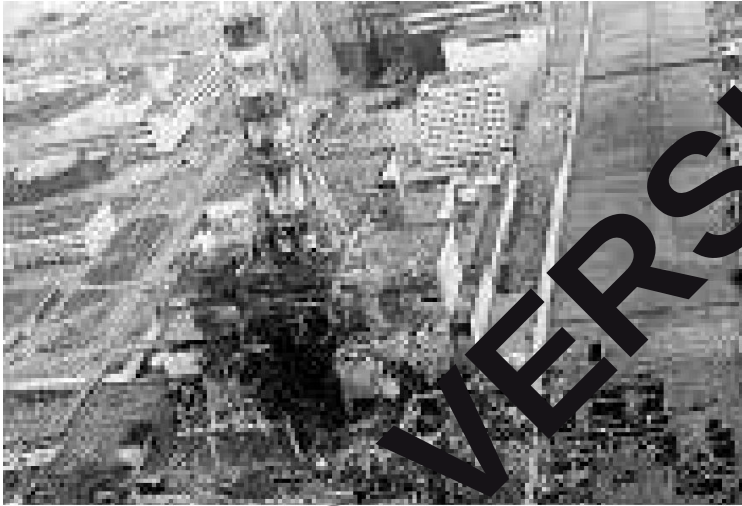
The Challenges of Construction

The primary challenge in building the sarcophagus was the immense radiation exposure. The reactor site was littered with highly radioactive debris, including chunks of reactor fuel and granite from the reactor core. Before construction could even begin, this debris had to be cleared. The task fell upon the liquidators—soldiers, scientists, engineers, and laborers—who braved extreme radiation to remove the wreckage by hand.

Robots were initially deployed to assist in the cleanup, but they failed almost immediately. The intense radiation fried their electronics, rendering them useless. This left human workers with no choice but to manually clear the reactor's remains, often working in shifts of just a few minutes to minimize their exposure. Time was another pressing concern. The reactor was still spewing radiation, and with winter approaching, construction had to be completed before snow and ice complicated the already perilous conditions. A project that would normally take years was compressed into just five months, forcing engineers to work at an unprecedented pace.

The sarcophagus was built primarily from steel and concrete, designed to encase the reactor and prevent further radioactive emissions. However, the high radiation levels made proper inspections and quality control nearly impossible. Cracks and gaps formed even as the structure was being built, and from the beginning, it was clear that this was only a temporary solution—a desperate measure to prevent an even greater catastrophe.





New Safe Confinement

Through the passing of time it became evident that the original sarcophagus was deteriorating and that a more permanent solution was needed. The result was the New Safe Confinement (NSC)—a massive steel arch designed to cover the existing structure and provide a long-term barrier against radiation leakage.

The NSC is the largest movable land-based structure ever built, standing as a modern marvel of engineering.

Due to high radiation levels, it was impossible to build directly over Reactor No. 4. Instead, the massive structure was assembled 300 meters away and then moved into place using hydraulic jacks—a process that took two weeks in November 2016. The new Safe Confinement has double layer steel arch to help in radiation shielding and it is also hermetically sealed, preventing rain, wind, and other elements from further degrading the radioactive remains. and also has inbuilt air filtration system to catch radioactive dust.

The Role of the Sarcophagus

Despite its flaws, the sarcophagus fulfilled its most critical function: it dramatically reduced the release of radiation into the atmosphere, shielding the outside world from the smoldering ruins of Reactor No. 4. and inside it lay a dormant demon that could wreck havoc if left out



Dimensions:

108 meters tall, 162 meters long, and 257 meters wide

Weight:

Over 36,000 tons

Construction Cost:

Around €1.5 billion

Lifespan:

100 years



Monument to Tragedy and Survival

The Chernobyl Sarcophagus stands as a monument to human resilience and ingenuity, built under the most extreme conditions imaginable. It is also a reminder of the immense dangers posed by nuclear energy when safety is compromised. While the New Safe Confinement has secured the site for now, Chernobyl's legacy remains, serving as a warning for future generations.

LE 24h
LE MANS®



There's something magical about watching the cars race into the night. It feels like you're part of history, watching legends being made. The energy around the track is contagious. You can't help but cheer for your team, but you also feel a deep respect for all the drivers," said Lucie, a long-time fanatic of Le Mans.

Have you ever heard of the Legendary 24-hour competition of sports cars? Well, this is famously known as Le Mans. The Le Mans 24 Hours, also called "La Sarthe," is one of the most prestigious and grueling motorsport events in the world, organized by the Automobile Club de l'Ouest (ACO), was first held in 1923 and has since become a global institution, held annually in the small town of Le Mans, France. This endurance race challenges the drivers and machines to perform at their peak for 24 hours calling it an ultimate endurance test for man and machine.s.

For most competitors, Le Mans is a test of persistence as much as it is a battle for speed, requiring careful strategy, tire management, and meticulous coordination between drivers, teams, and engineer.How does the race progress?

The race starts with a grand parade of several classes of cars, and as the drivers line up, there is a sense of anticipation in the air. Fans cheer for their favorite teams, while the sound of the cars echoing off the track fills the vast Le Mans circuit. The event takes place on a unique circuit that mixes closed public roads with purpose-built track sections. The track itself is a combination of fast straights, sharp corners, and technical sections that require precision and skill. As the race progresses, the atmosphere evolves, with tireless efforts from competitors, passionate crowds, and a legacy of unforgettable moments carved into the history of motorsport.



Tom Kristensen, who holds the record for the most Le Mans wins (nine), has spoken about the incredible satisfaction of crossing the finish line after 24 hours. For him, the key to success lies in teamwork in which a relief driver takes over the driving duties with two other co-drivers while one driver eats and rests before returning to drive.

The engineering teams who work relentlessly to fine-tune the car during the race. At the end of the 24 hours, the car which has driven the most laps of the track wins the race. During all these years, Porsche has won the most races as a manufacturer with 19 since their first in 1970. Audi is second with 13 wins, and Ferrari is third with 11 victories.

What excites the drivers?

Well, the answer is pretty simple. A person with a huge craze for the world of machines loves the roar of the engines, the shifting lights, the fans cheering from the stands, and the

dense nighttime fog creating an experience unlike any other. For many, it's not just a race but a symbol of dedication, pride, and passion. Racing at Le Mans often becomes a lifelong dream, with many drivers returning year after year to experience the challenge.

An unforgettable aspect of the race is watching the dramatic shift from day to night. As the sun sets, the atmosphere changes — the lights of the cars create a beautiful contrast against the darkened landscape. The sounds of the engines grow louder, and as the cars zoom by, the intensity of the race increases. It's at night when the test of endurance truly begins, with tired drivers pushing their limits and teams working under pressure. Le Mans has become more than just a race — it's a global event that transcends the motorsport world. It's a place where history is made, where legends rise, and where fans connect over a shared passion for speed, endurance, and teamwork.



“ The first 24-hour Le Mans race was held on May 26, 1923, at the Circuit de la Sarthe in hail and rain. It was organized at the time by the Automobile Club de l'Ouest (ACO), founded in 1906. ”



Over the years, many manufacturers have used the race as a proving ground for their latest technological innovations, leading to advancements in automotive engineering, safety, and performance.

The Le Mans 24 Hours continues to inspire not only motorsport enthusiasts but also aspiring drivers and engineers who dream of one day being part of this prestigious event. It's a race that embodies the spirit of perseverance, precision, and passion in your soul. It's a celebration of speed, history, and the indomitable human spirit — and it's no wonder that it remains one of the most iconic events in the world of motorsport.



AR / VR ASSISTED DESIGNING: REVOLUTIONIZING THE FUTURE OF DESIGN



In today's fast-paced world, design innovation is no longer constrained by traditional methods. Augmented Reality (AR) and Virtual Reality (VR) are transforming the way professionals approach design across multiple industries. These immersive technologies allow designers to visualize, manipulate, and iterate their concepts in real-time, eliminating the limits of two-dimensional drawings or static models. Whether in architecture, product development, or fashion, AR and VR assist in pushing the boundaries of creativity while providing a deeper understanding of the design process.

Augmented Reality overlays digital information onto the physical world, enhancing the designer's perspective by adding layers of data or 3D models directly into their environment. This seamless integration allows designers to visualize how their creations will interact with real-world spaces or materials. Virtual Reality, on the other hand, immerses the user in a completely digital environment, enabling a more holistic experience of design. For instance, architects can walk through their buildings before construction begins, making design decisions based on spatial awareness and aesthetics in real-time. These immersive technologies significantly reduce errors, saving time and resources while improving the overall quality of the final product.

One of the key advantages of AR/VR-assisted design is the ability to quickly iterate and test ideas. Designers can rapidly prototype within a virtual environment, making alterations and adjustments without the need for expensive materials or time-consuming processes. This iterative approach leads to faster decision-making and a more dynamic workflow. Furthermore, clients and stakeholders can engage with designs directly through virtual walkthroughs or augmented previews, offering real-time feedback that leads to more collaborative, client-centric design processes.



In industries like automotive and industrial design, AR and VR have proven indispensable. Designers can test product ergonomics, functionality, and aesthetics in a virtual space before physical prototypes are even created. This reduces the risks of costly mistakes and increases the likelihood of producing products that meet consumer expectations. Additionally, these technologies enhance collaboration among global teams, breaking down geographic barriers and fostering innovation through virtual teamwork, making it easier for professionals to share their vision with others across the world. Looking forward, the integration of AR and VR in design processes is expected to grow exponentially. As technology continues to evolve, these tools will become even more accessible and sophisticated, providing designers with more advanced capabilities such as haptic feedback, improved spatial awareness, and enhanced interactivity. The potential for AR and VR in design is limitless, paving the way for more efficient, creative, and engaging design practices. For departments looking to stay ahead of the curve, embracing these technologies is no longer a choice but a necessity for future success.



By leveraging AR and VR, the design industry is entering an era of unparalleled creativity and precision. These technologies not only enhance the capabilities of design professionals but also create a more immersive and collaborative environment that can result in groundbreaking products and experiences. As we continue to navigate this digital transformation, it's clear that AR and VR will play a pivotal role in shaping the future of design, bringing ideas to life in ways that were once confined to imagination.

The Indian Navy has long been a symbol of strength and maritime prowess, and INS Vikrant stands as one of its most significant achievements. As India's first indigenous aircraft carrier, INS Vikrant represents a remarkable milestone in the nation's journey toward self-reliance in defense manufacturing. Designed and built entirely in India, this mighty warship is not just a naval asset but a testament to the country's engineering excellence, strategic foresight, and growing dominance in the global maritime arena.

INS Vikrant, named after its predecessor that played a crucial role in the 1971 Indo-Pak war, carries a legacy of valor and strength. The new Vikrant, commissioned in September 2022, is a modern marvel, embodying state-of-the-art technology, advanced weaponry, and unparalleled operational capability. With a displacement of approximately 45,000 tons, it is the largest warship ever built in India, making it a game-changer for the Indian Navy.

The construction of INS Vikrant was a feat of engineering mastery, undertaken by Cochin Shipyard Limited. The project was a defining moment for India's 'Make in India' initiative, as nearly 76% of the carrier's components were sourced domestically. From its steel hull to its propulsion systems and radar technology, the warship reflects India's determination to reduce dependency on foreign defense imports and develop indigenous capabilities.

Equipped with a cutting-edge aviation complex, INS Vikrant can operate a variety of aircraft, including the MiG-29K fighter jets, helicopters, and indigenous aircraft in the future. Its ski-jump-assisted take-off and arrested recovery mechanism allow seamless carrier-based flight operations, strengthening India's maritime strike capabilities. This warship significantly enhances the Navy's ability to project power across the Indian Ocean and beyond, ensuring a formidable presence in international waters.

Beyond its firepower, INS Vikrant boasts advanced defense systems, including close-in weapon systems (CIWS), missile defenses, and electronic warfare capabilities. These ensure that the carrier is well-protected against potential threats, making it a secure command center for naval operations. The vessel also features an extensive medical facility, reinforcing its role in humanitarian assistance and disaster relief missions.

The commissioning of INS Vikrant has reinforced India's position as one of the select nations capable of designing and building aircraft carriers. It is a strategic asset that bolsters India's naval supremacy, particularly in the Indo-Pacific region, where maritime security and freedom of navigation are of paramount importance. With China's expanding naval footprint, Vikrant's addition to the fleet provides India with a stronger deterrent and enhances its maritime diplomacy.



Voyager 1 and Voyager 2

Pioneers of Space Exploration

Voyager 1 was launched on September 5, 1977, and became the first human-made object to enter interstellar space in 2012. It provided stunning images and data about Jupiter and Saturn, including the discovery of active volcanoes on Jupiter's moon Io and complex atmospheric structures on Saturn. Voyager 2 was launched on August 20, 1977, and remains the only spacecraft to have visited all four giant planets—Jupiter, Saturn, Uranus, and Neptune. It discovered 14 new moons, new rings, and unique planetary features, significantly expanding our understanding of the outer solar system.

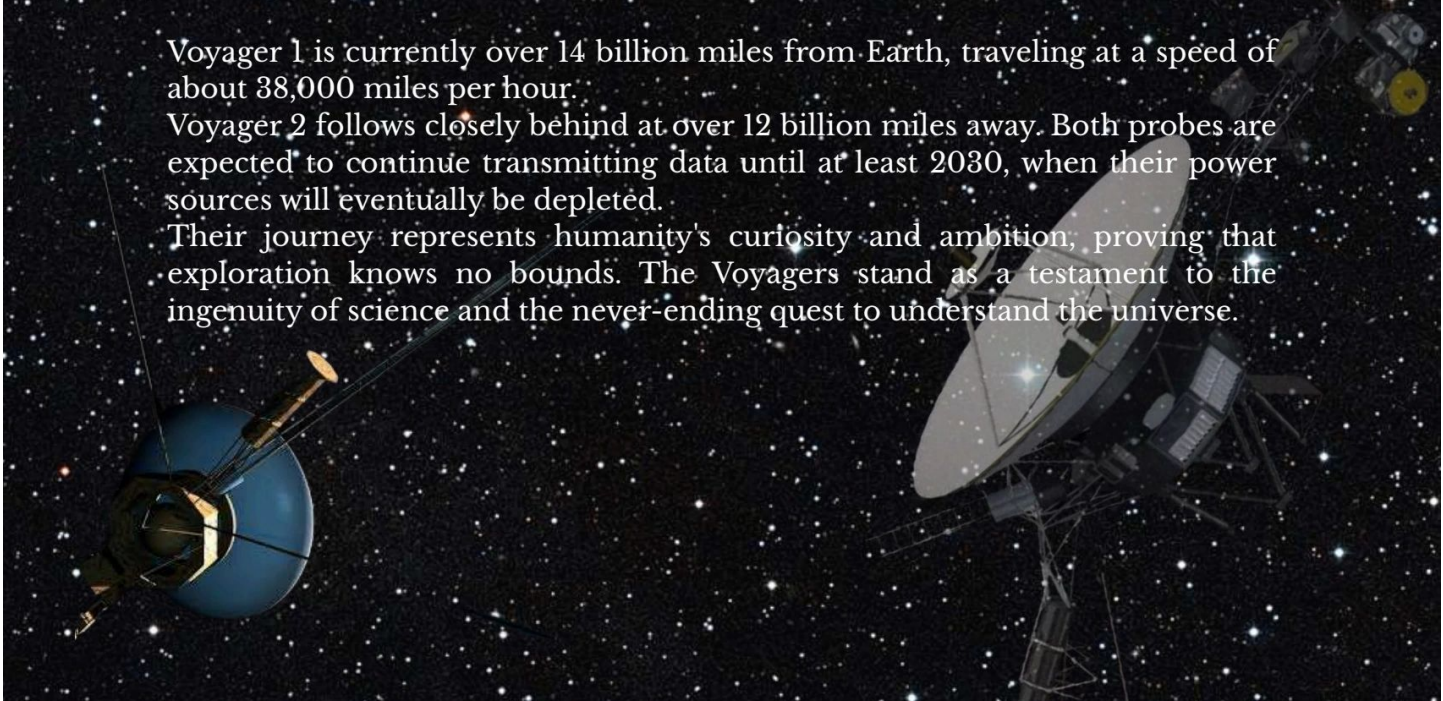
Both spacecraft carry the Golden Record, a time capsule with sounds and images representing Earth's culture, intended for any intelligent extraterrestrial life that might encounter them. As of today, both Voyagers continue to transmit valuable scientific data from the edge of the solar system, pushing the boundaries of human knowledge.

Despite their vast distance, NASA continues to communicate with the Voyager probes using the Deep Space Network. Their instruments, though aging, still send data about cosmic rays, magnetic fields, and the heliopause—the boundary between our solar system and interstellar space.

Voyager 1 is currently over 14 billion miles from Earth, traveling at a speed of about 38,000 miles per hour.

Voyager 2 follows closely behind at over 12 billion miles away. Both probes are expected to continue transmitting data until at least 2030, when their power sources will eventually be depleted.

Their journey represents humanity's curiosity and ambition, proving that exploration knows no bounds. The Voyagers stand as a testament to the ingenuity of science and the never-ending quest to understand the universe.





As INS Vikrant sails forward, it carries the spirit of a self-reliant India, ready to defend its maritime interests with confidence. It stands as a tribute to the nation's scientific and military capabilities, reminding the world that India is prepared to safeguard its sovereignty and contribute to regional stability.

The aircraft carrier is more than just a warship; it symbolizes India's aspirations as a global power. It has generated employment, boosted technological advancements, and paved the way for further naval innovations. The knowledge gained from its development will aid in future carrier projects, ensuring that India continues to strengthen its naval forces for years to come.



RPM PHOTO GALLERY



Real Persistent Mechxians.

DEMO VERSION



2021-25 BATCH



2022-26 BATCH

DEMO VERSION



2023-27 BATCH



2024-28 BATCH

DEMO VERSION



AUTO SHOW.

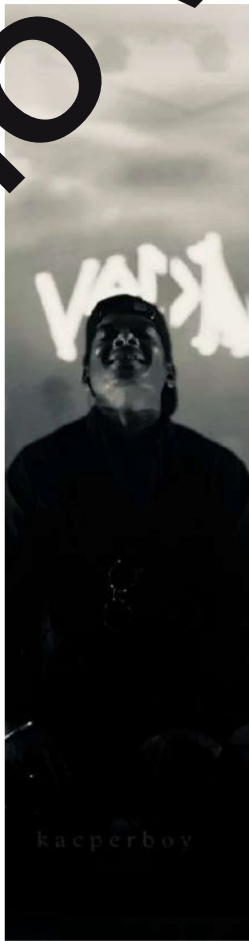
IT IS A PUBLIC EXHIBITION SHOWCASING CURRENT AND NEW AUTOMOBILE MODELS, CONCEPT CARS, OR CLASSIC VEHICLES, ATTENDED BY INDUSTRY PROFESSIONALS AND CAR ENTHUSIASTS.





PROSHOW & FASHION SHOW.

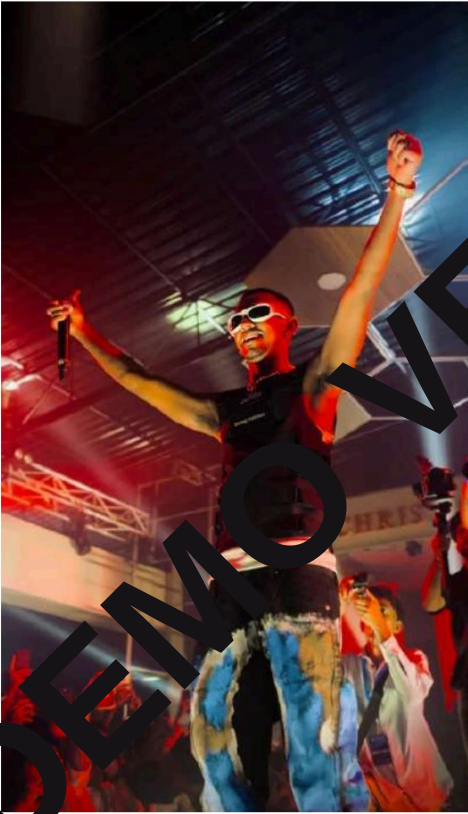
OUR DEPARTMENT PROUDLY HOSTED THE FASHION SHOW AURA, BLENDING THE WORLDS OF STYLE AND AUTOMOBILES IN A SPECTACULAR THEME INSPIRED CARS. THE EVENING SAW ENTHUSIASTIC PARTICIPATION FROM NUMEROUS COMPANIES AND INSTITUTIONS, MAKING IT A GRAND AND MEMORABLE CELEBRATION OF FASHION AND INNOVATION.



MASCHINEN
FEST '24
PROSHOW IS
SET TO HOST
THE SOUTH-
SIDE BANGER
FEATURING
BABY JEAN,
VEDAN, GABRI,
H3M,
SAMURAIZZ.

MASCHINEN FEST

DEMO VERSION



PRO SHOW





FASHION SHOW



TECH EVENTS.



SAE TECH FEST - 24



FKDC

FORMULA KART DESIGN COMPETITION



Team Phoenix Racing, with students from S3 and S5 ME, secured 14th place nationally in the FKDC competition by FMAE. Mentored by Dr. Viswanath Kaimal, the team focused on performance and efficiency in vehicle design.



Each member contributed unique skills, working together to optimize the kart. Success was attributed to dedication, teamwork, and innovation. The achievement showcases technical skills and highlights the importance of collaboration and perseverance. The team is proud of their accomplishments and motivated for future challenges.



Electric Scooter Design

Move over gas guzzlers, Team Panther is here to electrify the streets! This dynamic group of students, a vibrant mix of talent from the Mechanical and Electrical departments, is making waves in the world of sustainable transportation. Their recent triumph at the SAE India Southern Section Electric Scooter Design Competition 2023 is a shining example of their dedication and ingenuity. Team Panther secured an impressive second place in the Best Endurance category, showcasing their meticulously designed electric scooter that prioritized both range and performance.

TEAM PANTHER



Competition '2025

TEAM

ZEUS

Team Zeus successfully completed all stages of the SAE E-Scooter Competition at Rajalakshmi Engineering College, including document presentation, technical inspection, brake test, acceleration, endurance, and range tests. Their exceptional performance highlighted their technical expertise, innovation, and dedication to advancing electric mobility, setting a benchmark for future competitors.



SAE NATIONAL LEVEL BICYCLE DESIGN COMPETITION



CCE is among 60 premium institutes in Southern India and one of six from Kerala. The team completed all 10 rounds of the competition, including Technical Inspection round verified by SAE and ARAI officials and Automobile industry veterans.

Team Carbon Composite from CCE at SAE National Level Bicycle Design Competition included members from S4 ME. The team was guided by Mr.Dony Dominic, Mr.Sanal, Mr.Joy E T, and Mr. Arjun.



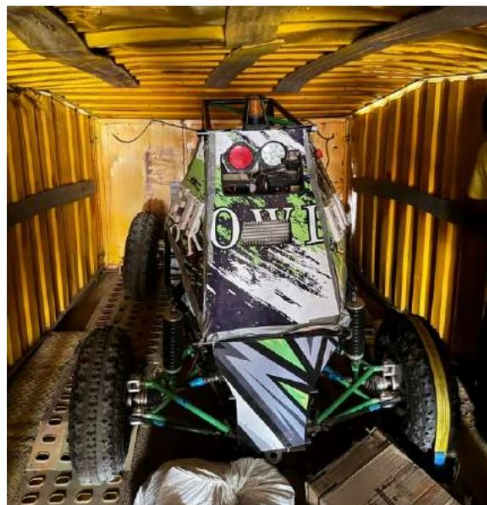


Our very own eBaja team, Prowler, composed of dedicated students from the Mechanical and Electrical Departments, has roared into the top rank of the eBaja 25 competition, securing an impressive All Kerala Rank 3!

This accomplishment not only brings immense pride to the Mechanical and Electrical departments but also serves as an inspiration to others, urging them to push boundaries and embrace the future of electric transportation.



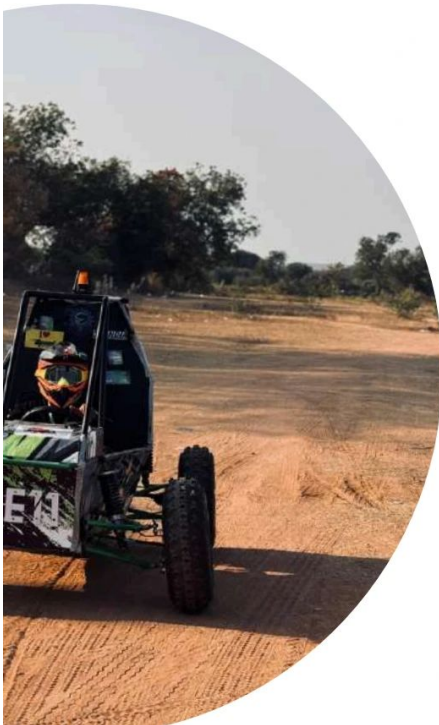
EBAJA'25



DEMO VERSION



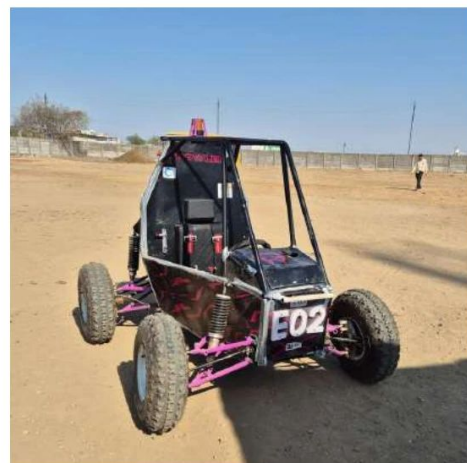
Fueled by an unwavering passion for innovation and a thirst for knowledge, this dynamic team has been dominating the virtual race tracks, leaving a trail of excellence in their wake. Their commitment to electric mobility and sustainable engineering, coupled with their technical prowess, has propelled them to a well-deserved podium finish.



SAEINDIA
Society of Automotive Engineers INDIA
CCE UK

ATVC'25

The Arravali Terrain Vehicle Championship (ATVC) 2025 was held at the IES University Bhopal organised by Infi League Motorsports Pvt.Ltd. It was held from 20th March -24th March in which team Prowler, consisting of 40 students represented our college. The team was successful in completing it's technical tests throughout the competition. It gave a remark in attaining the potential of each individual in different fields.



DEMO OVERSICION

RPM MAGAZINE



CHRIST
COLLEGE OF ENGINEERING



DEMO VERSION