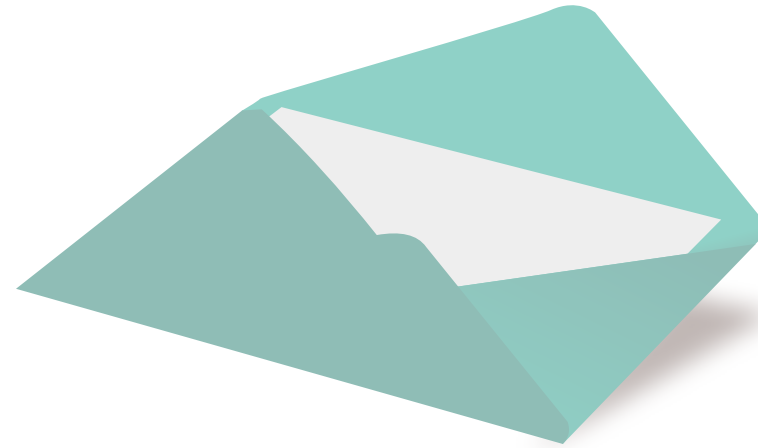


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30 years of excellence



**CADD Centre completed 30 years of excellence with honor and impeccable celebration!**

It is a matter of great pride the symbol of education and skill development - CADD Centre 30 years Logo was launched by several dignitaries across the Nation. Every celebration marks the revival of a lot of memories and achievements that CADD Centre made during these 30 years.

For more details please visit [www.facebook.com/caddcentre](http://www.facebook.com/caddcentre)



**ANSYS**

# What's new in Ansys 19?

## RELEASE

ANSYS 19 is also known as the Next Generation Pervasive Engineering Simulation technology. With the expanding digital world and growing data, companies are struggling with the pressure to improve performance to deliver high-quality products within a limited time. ANSYS 19, is designed to empower such engineers and professionals to contribute to the overall productivity. The enhanced capabilities of the technology aim to produce accurate results. Here are some of the many features that will support Pervasive Engineering Simulation.

- 3D Design**  
ANSYS 19 now introduced the new 3D design family of products.
- ✦ The package includes a real-time simulation environment that is developed to help engineers explore their designs and concepts.
  - ✦ The CAD modeling capabilities of the ANSYS Discovery SpaceClaim now have new assembly configurations.
  - ✦ Some of its supporting exploded views help engineers generate more efficient designs.
  - ✦ The technology helps to build upon topology optimization so that users can observe live progression to solve steps and make informed decisions.

- Embedded Software**  
ANSYS 19 now has powerful capabilities to carry out tasks. These tasks include:
- ✦ Workflow integration
  - ✦ Performance and usability
  - ✦ a fully certified embedded software with a human-machine interface (HMI) and
  - ✦ Design capabilities

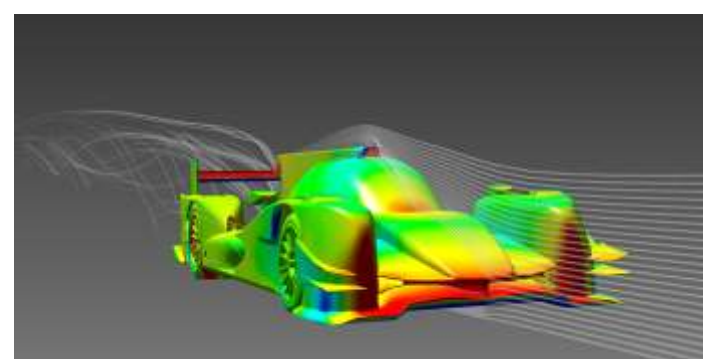
The technology is also supported by some dedicated solutions for automotive and avionics system and software. Added features here included capabilities for multi-rate application designs and enhanced HMI design capabilities that comply with ARINC 661 and that qualify for ISO 26262 and DO-178C.

**Electromagnetics**  
With the new technology, engineers can now design wireless, electrification and autonomous technology. The improved features of the technology include radar cross section analysis innovative electronic machine design, integrated electro-thermal analysis, and also a design kit to offer enhanced user experience with all the electromagnetic field simulation tools.

**Semiconductors**  
To meet the growing demands of the next generation computing capabilities, which is not only automotive, but also is mobile, and delivers high performance computing through the advanced system. The technology thus demands products that are bigger, faster, and more complex. The simulation environment offered by ANSYS 19 delivers a platform that is more comprehensive, enabled for Big Data and capable of solving different design attributes such as thermal properties, power noise, performance and reliability across the spectrum accelerating your product success.

- Systems**  
ANSYS 19 offers some of the most powerful capabilities in two crucial work areas:
- ✦ System simulation for battery management design and deployment
  - ✦ Functional safety and analysis to use across all safety-critical industries

ANSYS 19 now has some enhanced features to help engineers easily model the complete design of a battery management system. Another add-on, ANSYS Simplorer helps the engineers to simulate and test the entire system after design and development. ANSYS 19 expands the functional safety analysis across all industries.



## Five Successful Women Engineers India is Proud of

8th of March marks the International Woman's Day to celebrate the woman who has achieved great heights all over the world. Here we have five successful woman engineers that made the country proud.



**Priya Balasubramaniam**

Vice President of iPhone operations, Apple

Serving as the Vice President of iPhone operations, Priya Balasubramaniam started her journey with Apple since the year 2001. The lady then made great success in the International supply chain team. She has played a prominent role to expand Apple product manufacturing.



**Nandini Ramani**

Vice President of Engineering, Twitter

Nandini Ramani plays a significant role as the Vice President of Engineering in the organization. She is also a major contributor to Twitter's product strategy to promote the marketing activities, particularly, in India.



**Aparna Ramani**

Director of Engineering, Facebook

Aparna Ramani is currently working with Facebook as the Director of Engineering. She leads a team of professionals that deals with and processes real-time data and analysis. The team is a significant player in technology for Facebook's Newsfeed.



**Anjali Joshi**

Vice President of Product Management, Google

Anjali Joshi has been working with Google for ten years. She is well known for her versatility and her capability to handle any situation in the organization. She also has worked for Google's cloud, and infrastructure along with news and finance departments.



**Komal Mangtani**

Head of Data Intelligence, Uber

Komal, before joining Uber has been working as the head of engineering at Box. At present, the lady is working as the head of engineering at Uber. Her team works to help Uber explore more market opportunities and analyze the overall business performance.

*Here's to strong women.  
May we know them.  
May we be them.  
May we raise them.*



## 5 Machine Learning Trends Will Train the IoT Market

The ever-growing world of Information and Technology will soon experience new changes as IoT and machine learning is evolving rapidly. Here we have five of the most dominant machine learning trends that is set to change the IoT Market.

### Mobile Machine Learning

The highly compressed machine learning chips will be probably the biggest trend that will affect the presence of IoT. These chips with neural network capabilities will not be as powerful as their cloud-based counterparts, still they will be capable of machine learning tasks.

### Automated Data Science

The technology will automate tasks such as scribbling data, removing trivial errors, and deleting junk data which are carried out regularly and are also prone to errors. Such as advent, hence will make this process smooth.

### Synthetic Data

Researchers that work on IoT and machine learning algorithms might need a certain amount of data to carry out experiments. In such cases, instead of creating their own data, these professionals can use already existing relevant data. Probably knows as the synthetic data, this collection can be immediately linked to a machine learning algorithm to carry out experimentation.

### Machine Learning Hardware

Engineers have now developed some new machine learning hardware that can efficiently and quickly crunch numbers located on the cloud. These tools made the process more quick and affordable.

### The Machine Learning's Black Box Limitation

Machine learning algorithms are generally not programmed, but get evolved as experiment takes place to collect and process data to generate useful information. This can be a hurdle for those who try to deploy machine learning in medical devices. Researcher says they are still making efforts in this direction.

## AeroAstro Engineering Student Explores Life on Mars



Planet Mars has been fascinating the engineers all over the world for a long time. Researchers and scientists have been working to design simulated environments, rovers and safelights to explore the planet and its life possibilities.

- ✦ To experience the living conditions and environment, a project called Poland Mars Analogue Simulation was designed.
- ✦ The project aims to support real missions to Mars by giving researchers an opportunity to see what living and working on Mars will be like.
- ✦ A team of engineers and researchers started experimenting with this project.
- ✦ One among them was Aeronautics and Astronautics (AAE) graduate student Jennifer Pouplin. She has been an enthusiastic student studying astrodynamics and propulsion which made her a perfect fit for the experiment.

This is a one of a kind mission that is expected to help researchers potentially explore the planet.

## Growing Engineering Jobs and Salaries

The US Department of Labor's Bureau Labor Statistics (BLS) has recently stated that the rate of employment for engineering professionals is expected to rise up to 7% until the year 2026. Some other predictions are as follows.

- ✦ This number is growing as fast as the average of all the occupations.
- ✦ The agency has also predicted an approximate number of 194, 300 new jobs to open in engineering.
- ✦ A number of industries are expected to offer these job opportunities including rebuilding infrastructure, renewable energy, oil and gas extension, robotics, cybersecurity, and advanced manufacturing.
- ✦ In addition, the median annual wage for engineering occupants, in 2016 was observed as \$77,900 which was more than twice as high as all the occupations in the economy.

salary