Share your views with all your peers.

Your contributions have been published in the flaunt it section. We look forward to more. Keep designing, Keep Sending!

Step 1: Be inspired!

Step 2: Design, Draw, Doodle ....

Step 3: Ensure your work is original!

**Step 4:** Ensure it is related to your Engineering interests!

Step 5: Show us what you've got!! Mail it to corpcom@caddcentre.ws

We hope your submissions will reach us before the 20th of each month and that the images would be in the jpg format and articles within 250 words. We wish you all the best!



**Book Post** 





# If undelivered, please return to:

## **Congratulations** TIMEL **Winners!**















## CADD ZMONTHLY NEWSLETTER

your CAD / CAM highway







VOLUME - 9

ISSUE - 1 APRIL 2013





### **Be the Engineer** of your career

#### Don't fit in when you were born to stand out!

#### Dream a unique engineering dream!

Engineering remains a profession many aspire to. It is truly a professional's profession, but even this noble profession has recently lost its luster. This is mainly because students are not staying true to their passions but following the crowd in pursuing careers in fields distant from their passions.

To use an illustration, Jethro Tull -studied to be a lawyer but he ended up inventing the seed drill, a mechanical instrument that revolutionized agriculture. The trend today seems to be the opposite. We follow our passions into college – take up specialized courses but when it comes to choosing our careers, we bury our passions and follow the crowd.

CADDZOOM is carrying a series that takes a more in-depth look into the various engineering streams. We kick start this series with Mechanical Engineering.

#### Mechanical Engineering: inventing leverage!

Mechanical engineering, using principles of heat and mechanical power, designs, produces, and maintains mechanical systems. Mechanical engineers design and manufacture everything from small individual parts and devices (e.g., microscale sensors and inkjet printer nozzles) to large systems (e.g., spacecraft and machine tools). The sub disciplines of mechanical engineering include structural analysis, mechatronics and robotics, design and drafting, etc. Mechanical engineering emerged as a full-fledged stream during the industrial revolution.

However the mechanical engineering legacy starts with the





















simple machines. The six simple machines are: Lever, Wheel and Axel, Pulley, Inclined Plane, Wedge, Screw. A simple machine is an elementary device that has a specific movement (mechanism) providing a the wheel has been attributed as the invention, that changed the face of technology - its inventor can be regarded as the first mechanical engineer. Can you imagine what would have happened if he too had just gone with the flow? If farming wheel would have just gone on pulling the plough himself. The wheel wouldn't have been invented!

#### Ferris wheel!

The Ferris wheel has brought joy to numerous fans since day one. The abandonment and freedom that a Ferris wheel provides, was possible only because mechanical engineer's passions.

mechanical advantage. The invention of George Ferris remained true to his design and passions. In response to a challenge to create a monument to outdo The Eiffel tower, at the 1893 World's Columbian Exposition in Chicago. Ferris responded with a proposed wheel from which visitors would be able to view the entire exhibition. was the trend then, the inventor of the The planners feared his design for a rotating wheel towering over the grounds could not possibly be safe. Ferris persisted. He returned in a few weeks with several respectable endorsements from established engineers, and the committee agreed to allow construction to begin, also recruited several local investors to cover the \$400,000 cost of construction. The Ferris wheel thus stands as a testament to a

Reference: www.asme.org



All guidance is incomplete without the advice of experts. An accurate grip of any subject is only possible if theoretical knowledge is

met with practical examples. It's for that reason that we set up an interview for you with a leading mechanical engineer.

Meet Mr. K. Vishwanathan, Chairman and Managing Director CADD Centre Software Solutions. The world of CADD is his home ground. Mr. Vishwanathan's insight is valuable because of his 24 years of experience in the world of CAD and has exhaustive knowledge of the same. He began his career as a CADD Trainer and today is the Chairman and Managing Director CADD Centre Software Solutions. He is also certified AMIE – Mechanical, The

Associate Member of the Institution of Engineers (AMIE) is a professional certification given by Institution of Engineers (India).

This is an excerpt of the interview, more at www.caddcentre.ws/caddPlanCareer.php

#### 1. How is the field of mechanical engineering different from the other engineering streams?

Mechanical engineering in reality is comprehensive and there is no one other area of engineering which is complete without manufacturing. Mechanical engineering involves shorter product life cycles, as compared to civil and structural aspects referred to as infrastructure.

#### 2. What are the challenges a mechanical engineer faces, especially at the start of his/her career?

Common issue would be where to start and how to start. With a good blend of knowledge and right skills one could

visibly see opportunities to begin and build a strong career. Engineers have to master the entire engineering process "Concept to Reality", "Art to Part" and how to sell (their ideas) as well.

**Listen to experts** 

#### 3. What are the qualities the industry looks for in a budding engineer?

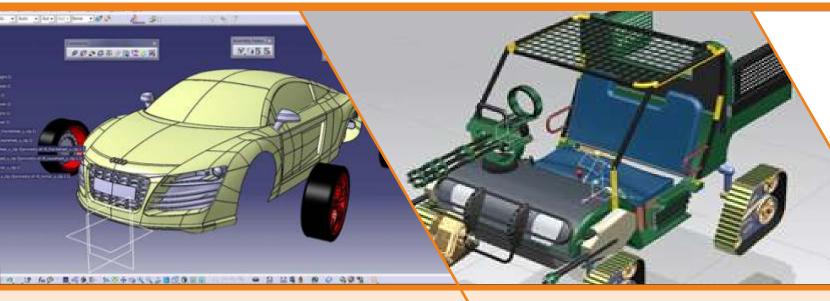
In addition to the knowledge and skill sets, industry constantly looks for curiosity, imagination, communication and sense of responsibility. Functional exposure and the flair to understand newer trends in technology and quickly adapt to them are equally vital as well.

#### 4. How can a mechanical engineer set himself/herself apart from his/her competition?

Acquiring thorough knowledge right from first principles is vital. By acquiring unique skills on the most recent technologies from CADD Centre, mechanical engineer can set himself apart.

#### Flaunt it!

CADD Centre has been imparting skills that companies CADD Centre has made student passing through its portals is an allenable mechanical engineers to stand out available to each aspiring mechanical rounder. CADD Centre students can bat, for the past 25 years. At CADD Centre we engineer tools such as AutoCAD 3D, Creo, bowl and field in the field of mechanical ensure that every student receives design MicroStation, Solidworks, Catia etc. Apart engineering with excellence. It is with great skills by mastering software drafting tools. from providing comprehensive drafting pride we flaunt the designs of budding By collaborating with leading software skills CADD Centre ensures that each mechanical engineers from our institute.



#### KIRAN ALOKKAN

He designed the above car in Pro Engineer / Wildfire and CATIA V5 R20. He completed his Diploma in Product Design from CADD Centre Basaveshwara Nagar, Bangalore.

#### **SARAVANAN**

Saravanan works as CADD Engineer at CADD Centre Salem. He has designed the above Mini-tanker.



He is currently pursing M.S from Coventry University (UK) in Engineering Completed his MCADD in CADD Centre Malleshwaram, Bangalore. These are the designs for crank of V8 Engines.

#### **ANKIT KAPOOR**

Robots designed by him in CATIA 5. He finished his Mechanical Engineering in 2012.

