

# Viren Sunil Kalsekar

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## EDUCATION

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**Massachusetts Institute of Technology (MIT)**, Cambridge, MA

**Master of Engineering in Manufacturing**

Expected June 2013

- Relevant Coursework: Precision Machine Design, Manufacturing Systems and Processes, Management in Engineering, Introduction to Manufacturing Systems, Supply Chain Management.

**Birla Institute of Technology & Science – Pilani**, India

**Bachelor of Mechanical Engineering**

May 2011

- Cumulative GPA: 4.57/5.0 Major GPA: 4.84/5.0 (converted from a scale of 10)

## EXPERIENCE

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**SKF India Limited**

July 2011 – July 2012

**Engineer**

- Designed and modeled a fixture design for the Roller Assembly for DGBB (Deep Groove Ball Bearings) which reduced the cycle time by 10%
- Developed and modified the design of current SKF products to meet the requirements of the customer according to the analysis of the specific applications
- Modified the Medical segment actuators to conform to the high exposure Solar Market requirements and developed the new actuator CASD (Compact Actuation Solar Drive)
- Recognized by the Managing Director of India for spearheading the acquisition of the first customers for SKF India in Solar and Biomass segments of the Renewables Department

**Mercedes Benz Research and Development, India**

July 2010 - Dec 2010

**Intern**

- **Adaptive Suspensions:**  
Worked on a project which aimed at complete elimination of shock by using laser enabled suspension systems. Designed a module that enabled a visual of a 3D model of the sample road and simulated the C-class and the S-class models on the road to compute the vibrations.
- **Comparison and Matching of Roads:** Developed a module to test the conformity of two readings taken of the same road at different times and different directions.

**Spaco Technologies Pvt. Ltd., India**

May 2009 - July 2009

**Summer Intern**

- Analyzed the AW assembly and components to increase the yield of M-test which resulted in optimized costs, time and increase in productivity

**Birla Institute of Technology & Science – Pilani**, India

Jan 2011 - May 2011

**Teaching Assistant**

- Worked as a Teaching Assistant for a class of 120 students for the course 'Computer Aided Design' and increased the performance of the class by a 12%

## RESEARCH PROJECTS

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**Birla Institute of Technology & Science – Pilani**, India

Jan 2010 - Dec 2011

- **Series Hybrid Vehicle:** Designed and constructed a Series Hybrid Vehicle for the low speed locomotion trucks in manufacturing units. The aim of this project was to design a car consisting of an engine as the prime mover, which on charging a battery runs the motor attached to the wheels to effectively reduce the carbon emission by a 5% and increase the fuel efficiency by a 20%.
- **Contact Stress Analysis of Spur Gears Using ANSYS:** Developed an algorithm to analyze the contact stresses in Spur Gears using 2D Shell Elements. The algorithm could use the
- **Disc Brakes used in a motorbike:** Designed and analyzed stress of **Disc Brakes used in a motorbike (Pulsar DT50 180cc)**.

## SKILLS

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- Software: Solid Works, Pro-E, Catia V5, Ansys, AutoCAD, Matlab, MS Office
- Programming Languages : C
- Languages: English, Hindi, Marathi

## AWARDS & ACTIVITIES

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- Finalists in the All-Terrain Transporter Event in National Technical Festival, Won the GANIT PARANGAT for proficiency in Mathematics, won the HIGHER SCHOOL SCHOLARSHIP, Represented the state of Maharashtra at the STATE LEVEL VOLLEYBALL tournament, Captain of the Winning Volleyball BITS team at National level, Event Manager for an event 'Junkyard Contraption' National Technical festival, Core member of the Department of Sponsorship for National Cultural Festival, Member of American society for Mechanical engineers (ASME).