

RESUME

Summary

M.Tech. (Mechanical -Design Engineering) from a reputed Institute, with 5 years of professional experience in leading organizations, including 3 years of experience in automobile engine design.

Personal details

Name: Swapnil Prakash Awate

Address: "Sarbhak", 33, Pushpaknagar, Borgad Road, Mhasrul, Nashik - 422004.

Phone: +919922956965

E-mail: awatesp123@rediffmail.com

Date of Birth: 22nd December 1981

Marital Status: Married

Career Objective

Work in a Noble Organization, where I can use my knowledge, create value. I believe, interest in job puts excellence in the work.

Professional Experience

- Total **5 years** experience.
- Currently working as a Assistant Professor in Mechanical Engg. Dept. of **Sandip Institute of Technology & Research Centre, Nashik.**
- Worked as a Designer in **Mahindra & Mahindra Ltd., Nashik** in Research & Development (Engines) Centre for 3 years. My responsibility was to design the Engine subsystems from safety, functionality, assembly and serviceability point of view. Resolution of various concerns and field failures.
- Worked as Post Graduate Engineer Trainee in **Larsen & Toubro Ltd., Mumbai** in Design Engg. Centre for 1 year. My responsibility was to design the Plant from Safety, Operability and maintainability point of view and perform complete Detail Engg. The activities I was involved in were Layout Engg., Modelling and Stress Analysis.
- Worked as a Project Trainee in **Tata Research Development & Design Centre**, Pune (A research division of TCS Ltd.) for 1 year. The research topic was – Synthesis of Compliant Mechanisms using Topology Optimization & Shape Matching Algorithm. It dealt with a novel approach of synthesizing this new class of mechanism called Compliant Mechanisms, in which links are not rigid.

Key Area of Work

- Conceptualize and create new design by using design tools.
- Releasing engineering orders.
- Do the relevant calculations and design engine components.
- Development of design specifications and testing specifications
- Studying engine validation reports and addressing the issues identified in it.
- Participate in discussion and utilize knowledge and skills from the point of view of vehicle integration
- Analysis of line issues and part failures and develop solutions to the problems
- Interact with different aggregates persons and participate in Design for Assembly (DFA), Design for Service (DFS) and Design for Manufacturing (DFM) and Design Failure Mode Effect Analysis (DFMEA)
- Ensuring execution of solutions agreed upon
- Meet project time and costs targets

Key Academic Projects

- **M.Tech Project** : Synthesis of Compliant Mechanisms using Topology Optimization & Shape Matching Algorithm

Guided by: Dr. Anand M. Deshpande,

Tata Research Development and Design Centre, Pune,
(Division of Tata Consultancy Services Ltd.)

In this work a compliant mechanism is synthesized that morphs the shape of aircraft wing to the target shape which will enhance aircraft's efficiency and improve its performance. The algorithm gives a design that can match two target shapes for different actuations. Similar method can be adapted to synthesis a compliant mechanism for Reflector Antenna of a Satellite, Robot Grippers etc.

- **B.E Project** : Electric Bicycle

As far as application of non-conventional energy sources to automobile world is concerned, the ultimate drive is going to be electric. This is an attempt to explore the possibility of electric drive and its advantages over conventional drive. A DC motor powered by a lead acid battery through a controller drives a conventional bicycle.

Education

Year	Degree/Specialization	Institute/University/Board	CGPA / %	Division / Class
2006	M.Tech [Design Engg.]	College of Engg. Pune, Pune	8.4/10	First class with distinction
2003	B.E [Mechanical Engg.]	Govt. College of Engg., Aurangabad	70.93%	First class with distinction
1999	H.S.C	M.S.B.S & H.S.E. Latur	89.67%	First class with distinction
1997	S.S.C	M.S.B.S. & H.S.E Kolhapur	78.53%	First class with distinction

Achievements & Extra-Curricular Interests

- Registered a **Patent** on – Integrated Involute type EGR Mixer for Automobile Diesel Engines.
- Awarded in appreciation for implementing Value Engineering solutions in M & M Ltd. in F'09 which gave M & M sustainable growth in the period of economic slowdown.
- Worked as a judge in **BAJA SAE India 2009** event. It is national level inter-college competition taking place only in 7 countries in the world.
- Participated in 'Mahindra Great Escape'- a unique off-road rally.
- Secured **first rank** in final year M.Tech. Examination.
- GATE Score: 96.56 Percentile.
- **First prize** at state level technical quiz contest during graduation.
- Prize in science debate competition at school level.
- **'Best Student Award'** in highschool.
- Passed MTSE (Maharashtra Talent Search Examination)
- Member of the Departmental Cricket Team, which was the Runner-up in L & T Tournament.
- Member of the Team 'Manthan' in M & M, which facilitates creation and execution of new ideas.
- Successfully planned, executed and completed many Expeditions in **Sahyadri, Himalayas and Ladakh**.

Computational Skills

C, FORTRAN, Pro-E, Ansys.

Hobbies

Driving, Traveling, Trekking, Photography, Reading.