

OMKAR ARVIND SHALIGRAM

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CAREER OBJECTIVE:

I'm a team man and I would like to pursue my career in work environment that will utilize and reinforce my technical, administrative skills and which will also help me to apply and gain new cutting edge skills and experiences in rapidly changing fields.

❖ ACADEMIC PROFILE:

EXAMINATION	UNIVERSITY/INSTITUTE	YEAR OF PASSING	PERCENTAGE /GPA		RANK
B.Tech (Mechanical)	College of Engineering, Pune	2010	SEM8	9.67	Within top 5 in Department
			SEM7	9.63	1st in Department
T.Y.B.Tech (Mechanical)	College of Engineering, Pune	2009	SEM6	9.13	Within top 5 in Department
			SEM5	9.58	1st in Department
S.Y.B.Tech (Mechanical)	College of Engineering, Pune	2008	SEM4	9.25	Within top 10 in Department
			SEM3	8.41	
F.Y.B.Tech (Mechanical)	College of Engineering, Pune	2007	SEM2	8.46	Within top 10 in Department
			SEM1	8.33	
Std. XII H.S.C	Modern College , Shivajinagar Pune	2006	92.67% CET 188/200		15 th in Merit list (8 th in Science) Maths 100/100 Biology 99/100
Std X S.S.C	Modern High School Ganeshkhind Pune -53	2004	93.60 %		10 th in Merit List

CUMULATIVE GRADE POINT AVERAGE (CGPA) = 9.06

❖ Professional Experience

Associate Engineer, Eaton Corporation

(Aug '10 - May '11)

- Worked with the Vehicle Group VAVE team on various projects to reduce cost of transmission equipments, viz. Gearbox, Clutch
- Undergone a training to understand the advanced transmission system developed by Eaton viz. Ultrashift (13 / 18 Speed Automated Transmission) , EPS (Dual Clutch Transmission)
- **Redesigned the Clutch Flywheel Ring** to save \$250,000 annually by analyzing the stress distribution. The challenge was to reduce weight of the Flywheel Ring without affecting the performance and also not affecting the current machining process. We conducted the idea generation session and using concept selection matrix implemented the feasible ideas in the model in PRO-E. I also interacted with experts from Auburn plant in USA. After 5 iterations of comparison of Baseline stress pattern (FEA) and modified stress pattern, the concept was finalised.
- Working on a new concept project of **Keyless transmission**. This is done by Press fitting the gears on the shaft and eliminating splines/ keys. The challenge is to design the press fit i.e. deciding the interference needed to transmit the rated torque with a safety factor.

❖ PROJECT WORK DONE:

- **BTech Project : Development of Flying Robot (Quadrotor) for Surveillance**

We received FORBES MARSHALL Outstanding BTech Project award in Mechanical Department.

Description:

A Quadrotor is an aircraft that becomes airborne due to the lift force provided by four rotors usually mounted in cross configuration.

In the development there were 3 major parts while constructing the robot. Mechanical design, Electronics circuit and Controlling software. The mechanical structure was such that it was lightweight, robust and well balanced. Propulsion system used was Brushless motors and Propellers which provided necessary thrust to lift its self weight of 1 kg. Electronic system such as controller, sensor (accelerometer) and control software were used to control the attitudes.

Several experiments were conducted to determine motor performance, controller response, and attitude stabilization of the Quadrotor. Robot performs satisfactory in guided condition and needs more fine tuning and noise reduction for free flight.

My Contribution: Concept selection, Literature survey, Propulsion system selection, Electronics hardware development and Control programming, fabrication of critical parts in Fab-Lab

❖ **PROJECT WORK DONE:**

- **Mechanical Team Leader of 'ROBOCON 09'** -
- **Co-Team Leader of 'ROBOCON2010 Egypt'**

My Contribution:

- I was a part of **design team and Fabrication team** of Automatic Robots.
- **Programming** of robot for building of 'Mankuara Pyramid'
- Also I was carrying out the overall coordination of Mechanical Team
- **'GE Edison Challenge** for Rural Energy Conservation and Development' - a low-cost, energy efficient stove.
- Project on **Natural ventilation** under the guidance of Prof S. Suryawanshi.
Description: To devise a system to cool ambient air and transfer it to the closed quarters without using any external power supply. This project has the potential to help the people living in areas which are most affected by the load shedding of electricity.

My Contribution:

Worked on ProE and partly CFD Modelling and Practical Prototype Manufacture

❖ **ELECTIVES:**

- **Final year: Robotics and Mechatronics**
- Third year: Advanced Manufacturing Technology
(Under guidance of Prof Emeritus Dr P.K. Mishra IIT Kharagpur)
- Std. XII : Information Technology (IT)

❖ **COMPUTER SKILLS/LANGUAGES KNOWN:**

- CAD - AutoCAD, Pro E
- Codevision, AVR Studio
- General - MS Office
- Operating System : Windows XP , Vista , Ubuntu
- Basic knowledge of C, Visual Basic, Java ,VBScript , JavaScript , HTML

❖ INDUSTRIAL TRAINING:

SR. NO.	NAME OF INDUSTRY	TRAINING PERIOD	DETAILS OF TRAINING
1	Accenture, Mumbai	45 hours	Course on “Attitudinal Leadership” conducted in COEP
2	FAB LAB	1 week	Installation , use and maintenance of various advance machinery in FAB LAB COEP

❖ CO-CURRICULAR ACTIVITIES:

A> ROBOTICS

1. Won **Second Prize** in National Level Dogfight (ROBOTICS) Competition in ‘MIND-SPARK’- 08 Organized by COEP
2. Won **Second Prize** in National Level Dogfight (ROBOTICS) Competition under ‘Wings’08 held at GCOE Aurangabad
3. Working as Robot Study Circle **Secretary- Coordinator** and **Core Committee member**
4. **Delivered a lecture** on Assembly of Line Tracer Robot for 12th std Students Conducted by Robot Study Circle COEP

B> FAB LAB:

1. Working on **SHOP BOT and Epilog Laser Cutter** in FAB LAB

C> Delivered a Presentation on ‘**Introduction to Nanotechnology**’

❖ OTHER ACHIEVEMENTS:

1. **Best academic student** of year 2005-6 and 2006-7 in **Modern college**
2. **Awarded HSC Board prize** for being 1st in Mathematics in 12th SCI
3. **MTS Consolation Prize** in 8th standard
4. Have Passed “**Praveshika Purna**”(3rd Level) in TABLA and “**Prarambhik**”(1st Level) in Harmonium
5. Had Participated in a TV Talent show representing the School
6. Had been **Head of Students Representatives** at School and CR from 5th to 10th Standard

❖ EXTRA-CURRICULAR ACTIVITIES:

1. Have been learning **JAPANESE** Language in **RANADE INSTITUTE** for last 3 years.
 - a> Passed **DIPLOMA** in Japanese from Pune University with **88%**
 - b> Passed **3Q** (3rd Level) of Japan Foundation with **97.5%** (2nd in West India zone)
2. **Actively Participated** in all Ranade Institutional activities such as Japanese Speech Competition, Song Competition, **Japanese Exhibition** And Admission Administration
3. Currently working as **ACCOUNTS HEAD** and **Core Committee Member** of Mind-Spark, National level Technical Event of COEP
4. Member of Publicity Team for college technical event – “Fervor 07”
5. Part of Marathi **Debating Group**
6. Managing Committee Member of “Sir Vishveshverayya” State Level Debate, Elocution Competition in the year 2008, 2009.
7. **Have written an Article** about the TREK in HIMALAYA in MESA magazine of Mechanical Department
8. **Participated in a play** ‘TRAIN NO. 2952’ on inauguration of Annual Social **Gathering** 2009 of the College
9. Sports : **Rowing (Currently on Diamond Scull)** and Active Member of Boat Club,
10. **Volunteered** for “80th Regatta”.
11. Participated in 81st Regatta in **Arrow formation**

❖ HOBBIES:

1. Rowing
2. Reading Books (English and Especially Marathi)
3. Trekking
4. Playing Tabla , Listening to Indian Classical Music
5. Playing Badminton , Chess
6. Swimming

❖ **PERSONAL PROFILE:**

- NAME: OMKAR ARVIND SHALIGRAM
- AGE: 20
- GENDER: MALE
- DATE OF BIRTH: 23rd MAY 1989
- E-MAIL ID: oshaligram@gmail.com
- CONTACT NUMBER: 9028771461 / 9960176550 / (020)25870194
- PERMENENT ADDRESS: B-6 MORAYA DARSHAN SUTARWADI PASHAN
PUNE 411021
- LANGUAGES: Marathi, English, Hindi, Japanese
- FATHERS NAME: Dr ARVIND DIGAMBAR SHALIGRAM

IF GIVEN AN OPPORTUNITY, I WILL PROVE MY CREDENTIALS TO THE BEST OF MY ABILITY.

OMKAR A. SHALIGRAM