



**Omkar Arvind Shaligram**  
**Mechanical Engineering**  
**Indian Institute of Technology, Bombay**  
**Specialization: Manufacturing Engineering**

**113100056**  
**M.Tech.**  
**Male**  
**DOB: 23/05/1989**

Examination	University	Institute	Year	CPI / %
Post Graduation	IIT Bombay	IIT Bombay	2012	9.40
Undergraduate Specialization: Mechanical				
Graduation	Pune University	College of Engineering, Pune (COEP)	2010	9.06

## PROFESSIONAL EXPERIENCE

**Eaton India Engineering Centre** Associate Engineer [Jul 10 – Jun 11]

- Worked with the **Vehicle Group** in Value Engineering team to reduce cost of transmission system.
- **Redesigned the Clutch Flywheel Ring to save \$250,000 annually** ; Designed **Keyless Transmission**

## SCHOLASTIC ACHIEVEMENTS

- **Department Rank 2** in Mtech Manufacturing Engineering, IIT Bombay [2012]
- Received **Forbes Marshal Most Outstanding BTech Project** award in mechanical department [2010]
- **1<sup>st</sup>** in the **state** in **Mathematics** (100% marks) - 12<sup>th</sup> Std; **99% in Biology** [2006]
- **2<sup>nd</sup>** in **West India** zone in **Japanese Language Proficiency Test 3Q** (Level 3) score- 97.5% [2008]

## KEY PROJECTS

**Developing a Parallel Kinematic Manipulator (PKM) robot for efficient CNC machining** [May12-Present]  
[Guide: Prof S S Pande, Mechanical Department IIT Bombay] [Masters Dissertation]

- **Interdisciplinary project** involving **Design, Fabrication and Control** of PKM.
- Currently studying various configurations of robots. **Simulating** the kinematics using MATLAB.
- Further work involves mechanical design, prototype manufacturing, actuator and sensor selection and system integration, developing **control algorithm** & implementing it on an **embedded controller**

**Application of CAD CAM in Jewellery** [Aug11-Nov11]

- Visited '**Imaginarium Technologies**' to understand & compare jewellery making using CAD & RP ;
- Studied advancements: **Reverse Engineering**, Intelligent Jewellery Design, **Virtual Jewellery shop**.

**Development of flying robot (Quadrotor) for surveillance [BTech Project]** [Jul 09 – May 10]

- Initiated and executed first stage of a big project.
- Worked on concept selection using QFD & AHP, propulsion system design, electronics development & Control, fabrication of critical parts in **MIT**(Massachusetts)**FABLAB** at COEP.

## POSITIONS OF RESPONSIBILITY

**Institute Overall Coordinator, Student Companion Program**, IIT Bombay [May12-Present]

- **Leading** a team of **16** department **coordinators** and **70** student **mentors** to manage buddy programs, Open Course Ware, Freshmen Forum etc. also organised Institute orientation for freshmen

**Overall Co-Team Leader of ROBOCON team**, COEP [May 08-Mar 10]

- **Led a team of 30** students from different years and specialisations for 2 years.

**Accounts Head, Mind-Spark**, Technical Festival of COEP [May 09- May10]

- Managed the budget of Rs **18 lakhs**. with a system to record cashflows; conducted **internal audit**.

## EXTRA-CURRICULAR ACHIEVEMENTS

- **Music**: Praveshika Purna (Level 3) in **Tabla** and Prarambhik(Level 1) in **Harmonium**
- **Sports**: Sculler of Diamond(Fibre Shell Boat) ,COEP -Trekking Deo Tibba Base Camp, Himalaya; Participant Swimming Marathon, IIT Bombay
- **Literary Arts**: Debating group member COEP
- **Social Service**: Taught Robotics to **economically weak** school children through **NGO Bhagini Nivedita**