

Vishwa Poswal

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EDUCATION

Masters of Science, Advance Mechanical Engineering (Pursuing)

University of Leeds, Leeds, UK

Bachelor of Technology, Mechanical Engineering (2018)

Manipal University Jaipur, Jaipur, India

Non-Medical, CBSE 12 (2014)

St. John's High School, Chandigarh, India



RELEVANT EXPERIENCE

Industrial Intern, JCB India Ltd., India

Jun'17 - Jul'17

Main responsibility was to assist the manufacturing and production team to problem-solve issues on the assembly line. The aim of this internship was to gain practical experience in industrial application and organisation methodologies like kaizen and 5S. My daily tasks included:

- Improvement of SOP to reduce tag time and risk factor
- Reassessment of the plant layout
- Redesigning of the plant layout to support automation and space optimisation
- Development of a gauge that enhanced the accuracy of operations

Industrial Intern, SML ISUZU Ltd., India

Jun'16 - Jul'16

Main responsibility was to critically analyse the manufacturing and production processes. The aim of this internship was to get a holistic view of production of Trucks and busses (GVW 6 – 8 tonne). My daily tasks included:

- Gaining an in-depth understanding of the engine, transmission, axle and paint shops and the assembly line
- Training with CRDi engines as a part of the powertrain
- Shadowing the team responsible for innovation on a combination of pneumatic and hydraulic braking systems in 4WDs
- Gaining insights into the application of advance manufacturing techniques using modern machinery

PROJECTS

Design, Development and Fabrication of a Personal 3D Printer

Jan'18 – May'18

The aim of this project was to design, develop and fabricate a compact, efficient and cost effective personal 3D printer for the respective needs and applications in developing countries and optimization of personal 3D printers for developing countries on the basis of a market analysis. The developing country in perspective for this project was India. Main learning points were:

- Preparation of questionnaires, execution of the market survey and quantification of the collected data
- Prototyping, designing, development and fabrication of a 3D printer
- Testing, problem-identification and problem-solving for optimum results

Identification of Human Thermal Comfort

Jul'18 – Dec'18

The aim of this work was to identify the human thermal comfort zone and the analysis of thermal comfort in terms of dry bulb temperature and relative humidity, during the transition season of fall in a composite region, i.e. Jaipur. The data for analysis was collected by means of a survey. Main learning points were:

- Understanding and application of the concepts of refrigeration and air conditioning
- Understanding the process of selection of the various parameters affecting research
- Preparation of questionnaires, execution of the survey and quantification of the collected data

RC Aeroplane

Jan'16 – Mar'16

This was a 2-phased project to build a Radio-Controlled Plane. In the first phase, I built a basic RC model of the conventional plane. The main learning points of the learning points from this phase were used in the second phase wherein I built a light weight and easy to manoeuvre RC plane. Main learning points were:

- Material analysis, design and fabrication of the body of the plane
 - Positioning of components such as motors, pushrods and batteries
 - Balancing and weight optimisation of the plane
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WORKSHOPS

Automobile Workshop by IIT Bombay, Mumbai, India

Dec'15

The aim of this workshop was to strengthen the knowledge in the basic essentials of an automobile. Main learning points were:

- Understanding of the evolution of the classical motor-car to the advanced hyper-cars
- Need for improvement of fuel efficiency and weight optimisation of a vehicle
- Understanding of the future scope of automobiles

Automobile Workshop by Student Motorsport, MUJ, Jaipur, India

Mar'15

The aim of this workshop was to appreciate the differences between two and four stroke engines by means of practical exposure. Main learning points were:

- The process of deconstructing and assembling two and four stroke engines
- Understanding safety mechanics with emphasis on Subaru safety experiments
- Gained exposure to modern technology, such as the use of sensors in active steering

Quadcopter by Robosapiens, MUJ, Jaipur, India

Oct'15

The aim of this workshop was to gain hands-on experience to build a quadcopter. Main learning points were:

- Construction and flight mechanisms of “x” and “+” type quadcopters
- Significance of electro-mechanical interface (EMI) in automation
- Innovative application of drones in the modern world

Autonomous Robot by Kyrion Technologies, MUJ, Jaipur, India

Sep'15

The aim of this workshop was to enable us to build an autonomous robot. Main learning points were:

- Understanding the use of mechanical materials in electrical and microelectromechanical systems
- Understanding the type of transducers and their uses in robotics
- Exposure to temperature detector and IR LEDs in autonomous robots

TECHNICAL SKILLS

- Catia
- AutoCAD
- MATLAB

OTHER EXPERIENCE: Events

Pit-stop, Manipal University Jaipur, India

Oct'15

A competition modeled after pit-stops of Formula One race, the participating teams competed to be the fastest servicing team. As the organising team leader, my main tasks were as follows:

- Prepared the event flow
- Managed a team of 5 volunteers
- Managed information flow between the core organising committee and the volunteer team

Model United Nations, Manipal University Jaipur, India

Apr'17

As the core organising committee member for the event's logistics, my main tasks were as follows:

- Managed a team of 7 organising committee members and 28 volunteers
- Gained the requisite permissions to organise the event
- Acted as the purchasing and procurement SPOC for other liaising departments

INTERESTS

- Chess • Archery • Football • Cricket • Fitness and Yoga • Combat Arts • Table Tennis
- Debate • Photography

References Available upon Request