

MEBIN PANDCHRIYIL BENNY

MECHANICAL DESIGN ENGINEER

DETAILS

ADDRESS

Liverpool, United Kingdom

PHONE

+44-7867024079

EMAIL

mebin.varghese28@gmail.com

LINKEDIN

www.linkedin.com/in/mebin-p-benny

LINKS

PORTFOLIO

<https://sites.google.com/view/m-p-benny/home>

TECHNICAL SKILLS

CAD

PTC CREO ●●●●●●
CATIA ●●●●○○

CAM

NX SIEMENS ●●●●○○

FEA

ANSYS ●●●●○○

CFD

openFOAM ●●●●●○

MATERIAL SELECTION

GRANTA ●●●●○○

RENDERING

KEYSHOT ●●●●●○
BLENDER ●●●●●○

OTHER SOFTWARE

MS OFFICE ●●●●●○
MS PROJECT ●●●●●○
SAP ERS ●●○○○○

SKILL PROFILE

Problem-solving

Teamwork

Leadership

Project Management

Innovative

PROFILE

A passionate and skilled Mechanical Design Engineer with 2 years of hands-on experience in Design and Development, I bring adaptability, professionalism, and problem-solving expertise. Ensuring each project surpasses expectations. I have been an integral part in the development of new products through the implementation of appropriate design methodologies along with the application of various assistive technical software and technical documentations to bring ideas to reality.

EDUCATION HISTORY

MSc. Mechanical Engineering Design with Management

University of Liverpool, Liverpool

Sept 2022 – Sept 2023

- Graduated with Merit
- Awarded Attainment Award: Top Project for the year 2022-2023.

Bachelor of Technology (Mechanical Engineering)

Lovely Professional University, India

Aug 2014 – Jun 2018

- Passed engineering degree with the First Division of CGPA 8.03 (72.27%).

EMPLOYMENT HISTORY

Design & Development Engineer

Rockman Industries Ltd, India

Jul 2018 – Jan 2020

Roles and Responsibilities:

Product Design and Development:

- Collaborate with cross-functional teams to conceptualise and design mechanical components and systems.
- Generate innovative design concepts and solutions that meet project objectives.
- Use CAD software (e.g., PTC CREO, CATIA) to create detailed 3D models and 2D drawings.

Technical Analysis:

- Perform structural and thermal analysis using simulation tools (e.g., ANSYS) to ensure the integrity and functionality of designs.
- Conduct tolerance analysis to ensure components can be manufactured and assembled accurately.

Materials and Manufacturing:

- Select appropriate materials for components based on performance, cost, and manufacturability using the CES tool. (e.g., GRANTA-ANSYS)

Prototyping and Testing:

- Create prototypes of mechanical designs for testing and validation.
- Plan and execute tests to verify and validate design performance.
- Analyse test results and make necessary design improvements.
- Implementing additive manufacturing as a tool for rapid prototyping to understand fits and tolerances.

Documentation:

- Prepare and review technical documents PFD, and DFMEA, engineering drawings, bills of materials, and design specifications.
- Maintain comprehensive records of design changes, calculations, and test results.

REFERENCE

Available on demand.

**Engineering Trainee
RSWM Pvt. Ltd., India****June 2017 – July 2017**

Learnings:

- Humidity Check & control for the production of yarn in Industries (HAVC system).
- Maintenance cycle of the machine, i.e., Predictive Maintenance, Overhauling and Breakdown maintenance.
- Calculation of MTBF, MTTF and MTTR to understand the practical application in the field of machine maintenance
- Power generation in Industries by Diesel Generators.

PROJECTS

3D-Printed Assistive Device for Cognitive Impairment**University of Liverpool****June 2023 – Aug 2023**

- Designed & developed a 3D-printed gyroscopic feeding assistive device for people suffering from cognitive impairment like Parkinson's disease, which makes it difficult to balance the cutlery on their own. The productive assistive device helps in self-feeding.
- Awarded Attainment Award: Top Project 2022-2023 by the University of Liverpool

Reverse Engineering a Gaming Console**University of Liverpool****Nov 2022 – Dec 2023**

- Measured all the physical dimensions of the gaming console and mapped those data digitally to create a 3D model.

Add-on Device for the Bugzi mobility wheelchair**University of Liverpool****Sept 2022 – May 2023**

- Designing and developing an add-on stencil device of Bugzi to help disabled children to help them in learning by developing motor movement.

Leakage in the Die-casted Viscous Clutch**Rockman Industries Ltd., India****Jan 2019 – Jan 2020**

- Achieved reduction in leakage defect from 30% to 12%.

Automated Cooling System for Heat Exchangers**Rockman Industries Ltd., India****Jul 2018 – Jan 2019**

- Achieved reduction of load on the cooling tower on the plant.

CERTIFICATION

Introduction to Geometric Dimensioning and Tolerancing

LinkedIn Learning Online Course

19th April 2023