MUKUND KRISHNAN

MECHANICAL ENGINEER



SKILLS

CAD

- SolidWorks, Fusion 360, AutoCAD used on various projects.
- AutoCAD and SolidWorks used to draft 2D engineering drawings.

MECHANICAL

- Designed parts to be Laser cut,
 CNC machined and 3-D printed.
- Designed and fabricated pneumatic circuit for automated industrial hammer.
- Implemented Root cause analysis,
 DFMEA and DVP for various projects.
- Industrial robot modelling on MATLAB to analysis its kinematic movements.
- Documented design reports for various projects.

ELECTRICAL & SOFTWARE

 RobotStudio, Python, C++, Arduino, MATLAB, Soldering, Wiring.

MANAGEMENT

- Microsoft Projects for planning and executing projects.
- Team lead in projects.

PROJECTS

ROBOT CELL

Created a robot cell using RobotStudio which performs simple welding operations.

PATH GUIDING BOT FOR BLIND

Autonomous robot that guides visually impaired people to their desired location.

EXPERIENCE

L&T Shipbuilding | Mechanical Design Engineer Intern July-September 2022

- Understood the Working of a **Multinational Shipbuilding** Company by analyzing their workflow, technical systems, industry requirements and client's needs.
- Researched into the subsystems of ships such as hull, engine, propulsion, powertrain, accommodation, pipping, weaponry, fuel types.
- Designed and performed gear reduction calculations for gearboxes used in ships.
- Optimized existing **bilge keel designs** in ships to reduce weight but not lose the structural integrity by performing **Root cause analysis**.

T.R. I Automotive: Student Start-up | Mechanical team lead July 2021 - April 2022

- Led the mechanical team in designing a solar powered electric vehicle and E-moped for Indian market using **SolidWorks** and **fusion 360**.
- Used Matlab and Simulink for motor modelling and range calculation for the vehicles.
- Used Microsoft Projects to plan and organize the startup.
- Gained recognition through multiple awards for developing extensive business plans for an emerging student startup.

CEG Motorsports | Senior Steering Vertical Engineer May 2021-present

- The SAE Collegiate club of College of Engineering Guindy, Anna University which participates in **BAJA SAE India** by designing and fabricating All-terrain vehicle (ATV).
- Used **SolidWorks**, **AutoCAD**, **Lotus and Ansys** to design and evaluate suspension and steering system of ATV.
- Designed parts to be Laser cut, CNC machined and 3-D printed.
- Worked with manual machining tool processes such as buffing, grinding, cutting.
- Performed **DFMEA** and **DVP** for the designed and fabricated ATV.

EDUCATION

CEG Anna University, Chennai

Bachelors in Mechanical Engineering

Aug 2020 - April 2024

University of Skovde, Sweden

Semester exchange program in Mechanical engineering

Aug 2022 - Jan 2023