# Tushar Pethkar

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#### GITHUB | HACKERRANK | LINKEDIN

# **EDUCATION**

CDAC BANGLORE march 2022 - sept 2022 POST GRADUATION DIPLOMA DEVELOPMENT IN ADVANCED COMPUTING(CDAC) Bangalore, Karnataka

Percentage: 61%

K. K. WAGH INSTITUTE OF ENGINEERING EDUCATION AND RESEARCH july 2016 - july 2020 Nashik, Maharashtra

**BACHELOR PRODUCTION ENGINEERING** 

CGPA: 6.62

K.T.H.M COLLAGE, NASHIK july 2015 - july 2016 HSC 12 TH Nashik, Maharashtra

Percentage: 59%%

MARATHA HIGH SCHOOL. NASHIK july 2013 - july 2014 SSC 10 TH Nashik, Maharashtra

Percentage: 85%%

SKILLS

PROGRAMMING LANGUAGES JAVA, JAVASCRIPT, .NET, SHELL, BASH

LIBRARIES/FRAMEWORKS REACT.JS, NODE.JS, EXPRESS Tools / Platforms ECLIPSE, VS CODE, MERN

**DATABASES** MYSQL. MONGODB

# PROJECTS / OPEN-SOURCE

## E-COM-WEB-APPLICATION | LINK

React.js, Node.js, Mongodb, Express

Web application created using MERN technologies. Frontend is made with react js and backend with Node.is, Database technology used is Mongodb. Web application uses express for routing routes, JWT for web/session tokens, bcrypt for hashing or encoding passwords of user for protection, Bootstrap is used for styling in front end, axios module used for communication with frontend and backend. Admin panel and inventory roles have extra access in website to manipulate users and products.

#### OPTIMIZATION OF PROCESS IN WHICH TWO 6 AXES ROBOTS WORK SPOT WELDING **OPERATION Inverse Kinematics**

This project had been done at JBM AUTO LTD, SATPUR, NASHIK. Job is lower cowl panel of XUV300. We had changed the program of both robotic arms to achieve optimum path(89 points has to spot weld). We have used inverse kinematics to get the combinations in which robotic arm not collide. Cycle time reduced from 208 sec to 134 sec. JPH increased by 9.6 units.

#### DESIGN, PRINTING, PROGRAMMING AND ASSEMBLY OF 6 AXIS ROBOTIC ARM MANIPULATOR WITH BLUETOOTH ANDROID APP CONTROLLER Arduino/C programming, Inverse Kinematics, **Robotics**

C programming is used in the robotic arm arduino controller. We have made design in PRO-E, programmed and made HMI to command robotic arm. HMI is a mobile application made on app inventor. It is made up of 6 servo motors which is inspires from the above project used robots.

### CERTIFICATIONS

• Inter Collage Football competitions