MANISH SHARMA

Github - $\underline{\text{Manish}} \diamond \text{LinkedIn}$ - $\underline{\text{Manish}}$ (+91)9511560530 $\diamond \text{ms}2641188@\text{gmail.com}$

EDUCATION

Indian Institute of Technology Mandi

Bachelor of Technology in Electrical Engineering; CGPA: 8.56/10(current)

Prince School, Sikar

Class - XII Percentage - 87.40% Class - X Percentage - 84.67%

Himachal Pradesh, India August 2017 - June 2021

Rajasthan, India

2016 2014

TECHNICAL STRENGTHS AND SKILLS

Languages: C, C++, Python, HTML, CSS, JS, PHP, MySQL, JSON

Libraries & Technologies: ReactJS, NodeJS, Python Flask, Pytorch, Keras, Git, Github, Arduino, Raspberry Pi Relevant Coursework: Information and Database Systems, Computation for engineers, Computer Organisation, Data Structure & Algorithm, Advanced Data Structure & Algorithm, Probability & Random Process, Linear Algebra, Engineering Mathematics, Pattern Recognition, Deep Learning and Applications, Computer Networks Analysis, Digital Signal Processing, Applied Electronics.

WORK EXPERIENCE

Robert Bosch, Bangalore

Dec'19-Feb'20

Research and Development Intern

· On-site internship.Designed and tested algorithms for new number system posit, includes Addition, Multiplication and Divider. Obtained 100% accuracy. tested as most efficient and optimized algorithm in terms of area and energy till now. Tech Stack - C++, Python, Verilog, Assembly, Windows batch language.

I4S Lab IIT Mandi Jun-July'19

Research Intern

· Designed a web page on I4S lab website for loss less compression and analysis of acceleration data(that was coming from a device, installed on bridge) for Bridge Health Monitoring. Data is saved on local web-server of IIT Mandi temporally until analysis is complete for that bunch of data.

PROJECTS

Non Invasive way to detect Diabetes-BETIC

Nov-Dec'18

Inter IIT Tech Meet 7

· Designed a supervised Machine learning model using GMM (Gaussian Mixture Model) in Matlab to predict Glucose concentration in blood. Use test and training data of the PPG signal of blood glucose. Obtain PPG signal using a non-invasive way i.e. Finger-clip sized device enabled with IR radiation.

Online Barber Oct'18

Hackathon 2018

· This is implementation of web app based online Barber shop where customer can register and get appointment for barber shop and similarly barber can operate customer's request online.

Travel Helper

DBMS Project

Jan-Feb'19

Programming Club

· A web portal to help and guide the tourists for traveling and staying in Himachal Pradesh. Worked on ReactJS for front-end and connect it to MySql using NodeJS Express for back-end part. This was a good experience to handle all these tools for full stack development.

Remote Operated Robotic Arm System(R.O.R.A.S.)

Feb-May'19

- · Designed two robotic arms(3D printed) using Inverse kinematics that can be controlled remotely using our hand movement imposition. These movements can be obtained by stereoscopic camera, to detect 3D orientation of our hand movements using open CV.
- To communicate the hand orientation data between remote place, we create a network between three Raspberry PI placing at remote place using Transmission Control Protocol for low ping speed and high communication speed and send the data using JSON array format.

Chart Drawing API Feb'20

REST API Project

· A NodeJs service where we can draw all charts on the basis of data - line charts, pie charts and so on. User can select 2 columns for x and y axis and charts are automatically drawn. Tech Stack used - ReactJS, bootstrap CSS, NodeJS-Express, MySQL Database.

AWARDS AND ACHIEVEMENTS

Achieved certificate of "Outstanding Academic performance in 2nd year EE".

Stood the first runner up in Intra college fest "Utkarsh", IIT mandi

Stood the fourth runner up in "Inter IIT tech meet?" for the project BETIC

POSITION OF RESPONSIBILITY

IEEE Student Branch Vice Chairperson and Member of IEEE Delhi section Robowar Event coordinator in EXODIA-19-Annual Fest IIT Mandi Core member at Programming and Robotronics Club, IIT Mandi UBA(Unnat Bharat Abhiyan) Coordinator at NSS IIT Mandi