

SKILLS

PROGRAMMING AND WEB

Python, Java, C, C++, CUDA
Django, Flask, NodeJS, Express, Firebase
ReactJS, HTML/CSS, Bootstrap

ARTIFICIAL INTELLIGENCE

Scikit-learn, TensorFlow, Keras, PyTorch
Nltk, Pandas, Numpy, Scipy,
CNN, R-CNN, YOLO
AWS Sage Maker, Google Colab, Jupyter
Intel Movidius Neural Compute Stick

ROBOTICS

Robot Operating System(ROS)
Reinforcement Learning
Gazebo, MuJoCo, OpenAI Gym
LeGO-LOAM, Navigation Stack
Raspberry Pi, NodeMCU, Arduino

LINKS

GitHub: KD-3
LinkedIn: kaustubh-dixit-8038bb171
Medium: @kaustubh_dixit
Kaggle: kaustubhdikshit

EDUCATION

IIT JODHPUR

B.TECH. MECHANICAL ENGINEERING
July 2018 - May 2022 | Jodhpur, India

CITY MONTESSORI SCHOOL

ISC BOARD | LUCKNOW, U.P.
12th Boards: 96.5 % | 10th Boards: 94.6 %
PCM with Computer Science

COURSES

UNDERGRADUATE

Probability, Statistics And Random
Processes
Linear Algebra and Calculus
Complex Analysis & Differential Equation
Computer Programming
Mechatronics
Basic Electronics Engineering

MOOCS

Neural Networks and Deep Learning
AWS Machine Learning Foundations
Control of Mobile Robots
Deploy Models with TensorFlow Serving and
Flask

EXTRA-CURRICULAR

Member of runner up school level basketball
team
Winner of City Level Singing Competition
'Lucknow Mahotsav'

EXPERIENCE

OTTONOMY IO | AUTONOMOUS ROBOTICS AND AI INTERN

June 2020 – Present

- Understanding and implementing the ROS(Robot Operating System) move base architecture
- Implemented LeGO-LOAM using Velodyne Lidar data
- Optimized path planning using Time Elastic Bands(TEB) as the local planner.

B-AEGIS LIFE SCIENCES AND RESEARCH | ARTIFICIAL INTELLIGENCE INTERN

May 2020 – June 2020

- Building an audio classifier to detect cough sounds from the surroundings in real time.
- Deploying the classifier as a web app using Flask and Tensorflow JS.

STUDENT PLACEMENT CELL | WEB DEVELOPER

May 2019 – Present | IIT Jodhpur | Deployed at <https://spc.iitj.ac.in/>

- Worked with a team of 5 members to develop MVT based portal in Django(Python) to automate and streamline end to end placement procedure for 1000+ students and recruiters.

PROJECTS

B.TECH. PROJECT | DEEP LEARNING FOR AUTOMATED OPTICAL INSPECTION | INTEL MOVIDIUS NEURAL COMPUTE STICK | SUPERVISOR: DR. RAVINDRA BRAHMAJOSYULA

- Built different deep learning models using Inception-V3, MobileNet and Caffe and compared their performance
- Used OpenVINO to convert the models to graph files for inferencing on Movidius NCS using Raspberry Pi 4

PROMETEO WEB PORTAL | WEB PORTAL FOR IIT JODHPUR'S TECHNICAL FESTIVAL | DEPLOYED AT <http://prometeo.in/>

- Developed a Django based MVT Portal to handle all the registrations for all the events in the Technical fest
- Handled the full deployment of the website using nginx and gunicorn and hosted it on Digital Ocean

TERRACE FARMING ROBOT | INTER IIT TECH, IIT ROORKEE

- Robot's design inspired by the fork-lift mechanism with three individual compartments lifted individually up and down the stairs through lead screws.
- Automated using NodeMCU, Ultrasonic sensors
- Modulated design to include farming operations like seeding, ploughing or watering

POSITION OF RESPONSIBILITY

- **ROBOTICS CLUB** | VICE CAPTAIN | ADMIN OF <https://github.com/RoboticsClubIITJ>
- **PROMETEO** | HEAD, WEB DEVELOPMENT, INTER COLLEGE TECH FEST
- **VARCHAS** | HEAD, WEB DEVELOPMENT, INTER COLLEGE SPORTS FEST
- **DEVLUP LABS** | OPEN SOURCE CONTRIBUTOR
- **CLASS REPRESENTATIVE** | B.TECH. MECHANICAL 2018 BATCH

ACHIEVEMENTS

- Ranked 1st position at Tata Crucible Hackathon 2019 out of 400+ teams for our project 'Smart City Enabler'.
- Awarded the scholarship of four lakh rupees by the Ministry of Science & Technology, Government of India to pursue higher studies in Science for excellence in 12th Boards.
- Published **articles** on Reinforcement and Deep Learning for '**The Startup**', Medium's largest active publication, followed by +689K people.