# Siddhant Saoji

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# **EDUCATION**

#### **IIT JODHPUR**

PRE-FIANL YEAR BTECH IN MECHANICAL ENGINEERING

Expected Dec 2021

GPA: 8.73/10(upto 4<sup>th</sup> semester)

#### **DEOGIRI JUNIOR COLLEGE**

HIGHER SECONDARY (HSC)

2017 Aurangabad, MH Percentage: 87.04%

#### STEPPING STONES HIGH SCHOOL

SECONDARY (CBSE)

2015 Aurangabad, MH

CGPA: 10/10

### LINKS

Github:// sziddhant LinkedIn:// siddhant-saoji

#### **UNDERGRADUATE**

Linear Algebra and Calculus Computer Programming Engineering Mechanics

Mechatronics

Mechanics of Solids

System Exploration and Workshop
Kinematics of Machines and Mechanisms
\*ongoing courses

#### **AUDIT**

Introduction to Image Processing Machine Learning Reinforcement Learning\*

# **SKILLS**

#### **PROGRAMMING**

Languages:

- $\bullet$   $\bigcirc$  /  $\bigcirc$  ++
- Python

#### **SOFTWARES**

- Matlab
- Cinderella 2.0
- Adams

#### OTHER TECHNOLOGIES

- Arduino
- NodeMCU
- Raspberry Pi
- Beaglebone

#### PRO JECTS

# QRRT:QUALITY BIASED INCREMENTAL RRT FOR OPTIMAL MOTION PLANNING\* | Summer Project

Guide: Dr Suril V Shah | IIT Jodhpur

• Implementing the qRRT algorithm for mobile robots using **reinforcement learning**.

#### **ERGONOMICS OF ON-SCREEN KEYBOARD** | B.Tech Project

Guide: Dr B.Ravindra | IIT Jodhpur

- Analyzed the centroid computed using various **image processing** algorithms.
- Studied the effect of pressure and different finger on the centroid.
- Applying the concept for suggesting improvements for better ergonomics.

#### **NETRA** | IMU BASED INDOOR NAVIGATION

Texas Instruments IICDC 2018

- Applied dead reckoning for indoor navigation without expensive infrastructure.
- Implemeted on **Beaglebone black** and 9 axis IMU for the computation.
- Audio and haptic feedback for navigation especially for the visually impaired

#### **BO** | CHAT BOT | MICROSOFT CODE.FUN.DO++

Open Sourced Github | Submission video YouTube

- Built a multi-functional chat bot deployed on **Facebook Messenger**, which can be used by affected people as well as rescue teams in case of a disaster.
- Technologies: Microsoft Azure, Python, LUIS, Flask, MySQL

# HONORS AND ACHIEVEMENTS

 Semi-finalist in DST and Texas Instruments India Innovation Challenge Design Contest 2018 among 346 teams comprising of 1185 students from 180 colleges

# POSITIONS OF RESPONSIBILITY

#### **AERO MODELLING CLUB** | CAPTAIN

Aug 2018 - Present | IIT Jodhpur

- Conducted club sessions and organized guest lectures and workshops
- Organized club events and workshops in Nimble 2019

#### QUIZ CLUB | VICE CAPTAIN

Aug 2018 - Present | IIT Jodhpur

- Conducted Open and internal Quizzing sessions
- Organized inter-college Quiz in Ignus 2019

#### **ROBOTICS CLUB** | CORE MEMBER

Aug 2018 - Present | IIT Jodhpur

• Made various projects such as room automation

# **EXTRACURRICULAR**

- Assistant-Head of services department in Ignus 2019
- Played for the college basketball team in Sangram 2018 organized by IIT Roorkee.
- Participated in Tech-Fest organized by IIT Bombay.