

# Surname Name Father

Indian Institute of Technology, Goa

Fourth Year **Undergraduate** , **Mechanical Engineering**  
**Add:** B 204, Royal lake Apts., Brother Patil Road, somewhere in, Pune, MH 411000  
e-mail : **shaja.india@iitgoa.ac.in** • Phone : **+91 99XXX XXXXX**

## Objective

Candidate for Bachelors of Technology, Mechanical Engineering from the School of Mechanical Sciences, IIT Goa.  
Relevant Coursework: Finite Element Method, Continuum Mechanics, Mechanics of Materials, Fluid Mechanics, Heat Transfer, Thermodynamics, Applied Thermodynamics, Kinematics and Dynamics of Machines, Mechanical Measurements, Numerical Analysis, Microprocessor and Automatic Controls. // placeholder

## Education

### Indian Institute of Technology Goa

Batch of 2016-20 | CPI: 7.96/10.00

- Candidate for Bachelors of Technology, Mechanical Engineering from the School of Mechanical Sciences, IIT Goa.
- Relevant Coursework: Finite Element Method, Continuum Mechanics, Mechanics of Materials, Fluid Mechanics, Heat Transfer, Thermodynamics, Applied Thermodynamics, Kinematics and Dynamics of Machines, Mechanical Measurements, Numerical Analysis, Microprocessor and Automatic Controls.

### Rajiv Gandhi School of E-Learning and Science Junior College, Pune

Maharashtra State Board 2013-15 | Score: 78%

- Did Matriculation from Maharashtra HSC in Sciences with Bio-focal in Computer Sciences.

## B. Tech Project

### Building an optical tomography setup for flow visualization using off-the-shelf components

Under the guidance of Dr Anirudha Ambekar

- Optical tomography is a scientific imaging technique that creates a digital volumetric model of the region of interest by reconstructing images made from light transmitted and scattered throughout the region.
- It can be used to monitor the flow-fields under various conditions. The project aims to build such a system using off-the-shelf cameras and components. // placeholder

## Course Projects & Technical Experience

### Microprocessor and Automatic Controls Lab, IIT Goa: Robot for crack detection in Pipes [Academic Project]

January-April 2019

- Design and Manufacture a Robot to detect cracks in the interior of a Pipe using Ultrasonic Sensors.

### Environmental Sciences, IIT Goa: "Water Water Everywhere, Not a Single Drop to Drink" [Academic Project]

January-March 2019

- An Academic Case Study of the Mumbai Floods, Marathwada Droughts and Blue Green Infrastructure.

### IIT Goa Motorsports

Co-Founder and Chassis Design In-Charge | Nov-Sept 2017

- Co-Founded an Institute Motorsports Team to compete in the national collegiate level competition, Formula Bharat.
- Designed the steel framed tubular chassis and helped design the bodyworks for a Formula Style Electric Racing Vehicle.

## Work Experience

### Kalyani Centre for Technology & Innovation

Summer Engineering Intern | May-June 2019

- Designed a fixture and testing Specimen for High Cycle fatigue test with axial loading of Transverse Butt Welded GMAW/MIG (Gas Metal Arc Welding/Metal Inert Gas) Steel Specimen.
- Performed metallography tests on welded metal specimen.
- Studied the results of the metallography and tensile tests.

### Applied Mechanics Lab, IIT Kanpur

Intern under the Guidance of Dr Ishan Sharma, Applied Mechanics Lab, IIT Kanpur | May-June 2018

- Designed Apparatus to Study the Flow of Grains around rotating and gravitating body.
- Analysed Granular flow around obstacles using Discrete Element Method Software LIGGGHTS.

### Bajaj Auto Ltd. Chakan

Intern | Dec 2017

- Project: Development of online gauging system in Cam Shaft and Crank Shaft Assembly.

### Institute Technical Summer Project-IIT Bombay

Summer Project | June-July 2017

- Designed and built a two-digit robotic arm with 360-degree swivel.
- Drafted and programmed a multi-functional and multi-modal Bluetooth-enabled app interface to control the arm.

## Extracurriculars & Positions Of Responsibilities

Teaching Assistant for the Course CE 102:

Engineering Mechanics, Spring Semester 2018-19, IIT Goa

Cult Rang, Creative Solutions Team In-Charge:

IIT Goa Cultural Festival Organising Team [Dec 2018-Present]

Co-Founder, Design and Layout Executive:

IIT Goa Institute Editorial Board: Gurukul Varta [Aug 17- Jan 2019]

Branch Representative:

IIT Goa B. Tech Mechanical Engineering, Academic Year: 2017-18

Teaching Assistant for the Course CS 101:

Computer Programming, Autumn Semester 2017, IIT Goa

## Skills

**Computer Skills:** C, C++, AutoCAD, Solidworks, Autodesk Inventor, Discrete Element Method using LIGGGHTS and LAMMPS, MATLAB, Simulink, Scilab, Gnuplot, Ovito, Adobe InDesign, Adobe Illustrator, Inkscape, MS Word, MS Excel

**Manufacturing Processes:** CNC, Welding, Lathe Machine Operations, Drilling, Milling, Shaper Machine Operations

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