

# Hrishi Raj Singh

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## Education

### INDIAN INSTITUTE OF TECHNOLOGY

B.TECH IN CHEMICAL ENGINEERING

2020-2024

Jodhpur, Rajasthan

### DAV PUBLIC SCHOOL, KHAGAUL

CBSE BOARD - CLASS XII

May 2019

Patna, Bihar

90.8%

CBSE BOARD - CLASS X

May 2017

Patna, Bihar

CGPA: 9.8

## Relevant Coursework

Process Control & AI Applications

Process Plant Design & Economics

Fluid Mechanics

Introduction to Bio Engineering

Introduction to Machine Learning

Data Structures & Algorithms

Probability, Statistics & Stochastic Processes

Scientific Computations

Signal & Systems

## Skills

### PROGRAMMING

Python • C • C++ • HTML • CSS • JavaScript •

React JS • SQL

### MISCELLANEOUS

Matlab • Aspen Plus • SolidWorks • ImageJ •

Adobe Creative Suite • Figma • Microsoft

Office • Firebase • Git

## Experience

### SUMMER RESEARCH INTERNSHIP UNDER THE SERB PROJECT

ELECTRODESALTING OF WATER-IN-OIL

EMULSION: AN EXPERIMENT, DESIGN, AND

SCALE-UP TO SMART ELECTROCOALESCER.

May'22 – July'22

IIT, Jodhpur

- Hands-on Experience at Research lab for electrodesalting of water-in-oil emulsion, analyzing the droplet sizes on experimenting with different emulsions sample using ImageJ.

### INDUSTRIAL VISIT

COMMON EFFLUENT TREATMENT PLANT

Jan'23

Sangaria, Jodhpur

## Recent Projects

### DESIGN OF PHOTOBIOREACTOR

SUPERVISOR: DR. RAMESH ASAPU | IIT, JODHPUR

- This project deals with Comparing the existing designs of photobioreactors that are already in field-level trials and understanding pain points for upscaling and also designing the improved photobioreactor for efficient usage of sunlight.

### DATA SCIENCE FOR MATERIAL INNOVATION

SUPERVISOR: DR. DEEPAK ARORA | IIT, JODHPUR

- To reduce the time-to-market and the development cost of new polymer products, Data Science is applied to prepared Data sets based on the idea of training machine learning algorithms on large databases to predict polymer Density.

### ACETONE VIA DEHYDROGENATION OF 2-PROPANOL (IPA)

SUPERVISOR: DR. SUMIT KAMAL | IIT, JODHPUR

- Aspen Simulation on to achieve 100TPD production of Acetone from IPA via dehydrogenation which involved various unit operations and its optimization for industry level with the detailed economics estimation to calculate its pay-back period.

## Co-curricular

### WEB DEVELOPMENT

CHEM-E-SORPTION'23

- Coordinated the Web Development Team, I was responsible for managing the front-end development and deployment process. My role included overseeing the team's progress, ensuring the timely delivery of projects, and maintaining high-quality standards.

## Volunteering and Leadership experiences

### EDITOR-IN-CHIEF

PHEME- THE NEWSLETTER CLUB OF IITJ

- Led a team of 10 writers and editors to produce newsletters for the college community.
- Developed and implemented editorial guidelines to ensure consistency in content quality.

### EVENT ORGANIZER

CHEMICAL ENGINEERING SOCIETY

- Organized various successful events for chemical engineering students with up to 100 attendees.
- Oversaw the planning and execution of events and its rules.