# RUDRA KESHAV ||BS19B025

Indian Institute of Technology Madras



EDUCATION				
Program	Institution	%/CGPA	Year	
B.S.&M.S.in Biological Sciences	IIT Madras, Chennai	7.43	2024	
Class XII (CBSE)	Modern English School, Nawada, Bihar	85.4	2018	
Class X (CBSE)	Modern English School, Nawada, Bihar	8.8	2016	

#### SCHOLASTIC ACHIEVEMENTS

• Got Hindustan Pratibha Samman award by Hindustan Newspaper.

	RELEVANT COURSES AND SKILL	S **NPTEL *Professional Courses
Introduction to Programming*	Biostatistics*	S-Basic Calculus-1**
Series and Matrices*	Industrial Economics*	Intro to Abstract & Linear Algebra**
Principles of Economics*	Differential Equations*	E-Advanced Engineering Maths**
Computational Neuroscience*	Material and Energy Balances*	Numerical methods for biology*

**Programming Languages**: C ,Python ,Matlab\*

#### PROFESSIONAL EXPERIENCES

## **Summer Internship : Nanomaterials in biotechnology. (E.Cell IIT Hyderabad)**

(*May* '21 – *Jun* '21)

- Led research in applying nanomaterials to biotechnology, resulting in advancements such as targeted drug delivery, enhanced diagnostic sensitivity, and efficient gene therapy.
- explored innovative applications of nanomaterials, particularly in biomedicine, cancer diagnostics, and drug delivery.

# Characterization of floral waste and Anaerobic digestion, Research Internship(IIT BHU) (May '22 – July 22)

- Implemented innovative methods to harness floral waste's potential, leading to successful biogas production and odor management. Found mass percentages of carbon, lignin, ash content etc. present in the floral waste.
- Achieved efficient biogas production from floral waste through anaerobic digestion, contributing to environmental preservation and renewable energy generation.
- Identified floral waste as a promising substrate for biogas production, addressing challenges in solid waste disposal and reducing greenhouse gas emissions.

## PROJECTS \*ongoing

#### Colouring of Biodegradable drone using spider silk., Guide: V. Kesavan (DDP Project)\*

(Aug'23 – ongoing)

- Contributed to project aiming for eco-friendly aerial solutions. Emphasized on tissue-matching stiffness & biocompatibility.
- materials selection for biomedical applications, considering mechanical, chemical, and biological properties
- Researched biodegradable drone design, integrating strong spider silk for structural integrity.
- Developing innovative concepts to enhance drone sustainability. Working on materials testing and prototype construction.

## **Project Title: To-Do List Web Application (Angular)**

(Jul'22-Aug'22)

- Developed dynamic & user-friendly To-Do List web application using Angular framework, allowing users to efficiently manage
- Implemented features for adding, deleting, and updating tasks, along with the capability to create and manage multiple sub-todos within each task, enhancing task organization and productivity.
- Tools Used: Angular, TypeScript, HTML, CSS, Bootstrap

## **Project Title: Bus Tracking Web Application**

( (Jul'22- Aug'22)

- Collaborated in a team of 5 to develop a real-time bus tracking web application for campus transportation. Designed the user interface and backend logic to display live bus locations on a map.
- Utilized GPS data from buses via APIs to provide accurate real-time coordinates. Implemented features for route visualization, bus arrival predictions, and user-friendly interface.
- Tools Used: React.js, Node.js, APIs (GPS data)

## POSITION OF RESPONSIBILITIES

#### Coordinator at DMC(Disaster Management Committee) ,2022

(May '22– Dec '22)

- Led Quality Management System (QMS) vertical, overseeing its implementation and operations
- Ensured adherence to quality standards, process optimization, and continuous improvement. Managed team and streamlined QMS processes for enhanced efficiency and compliance.
- Made comprehensive event reports, including fire drills, 2nd october dry cleaning along roadside Delhi avenue in IITM.

EATRA CURRICULARS		
HOBBIES	SPORTS:Took part in SAMANWAY 2019 IITM.	
HODDIES	• Learned to Keyboard in NCA course ,2019.Took part in singing programmes in school.	
	During the lockdown, from feb. to may I served as a Tutor at Filo Tutor app, facilitating virtual	
TEACHING	learning for students across diverse subjects from class 9th to 12th, preparing for JEE, NEET	
(Feb '22 – May '22)	During the lockdown, I successfully adapted to online teaching methods and provided effective	
	instruction to students, ensuring continuous learning and academic progress.	

EVTDA CHIDDICHI ADC