RUDRA KESHAV ||BS19B025

Indian Institute of Technology Madras

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| **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.

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| **RELEVANT COURSES AND SKILLS \*\*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\*

*(May’21 – Jun’21)*

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

**PROFESSIONAL EXPERIENCES**

● 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.

*(Aug’23 – ongoing)*

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

**\*ongoing**

**PROJECTS**

* 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)

**(***May’22– Dec’22)*

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

**POSITION OF RESPONSIBILITIES**

* + 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.

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