



EDUCATION

<b>MIT ADT – School of Food Technology</b> <b>India</b> B.Tech. – Food Technology CGPA – 8.5	<b>Pune, Maharashtra</b>  (2022 - 2026)
<b>TP BHATIA COLLEGE OF SCIENCE</b> 12th Grade - HSC	<b>Mumbai, Maharashtra</b> (2022)
<b>POORNA PRAJNA HIGHSCHOOL</b> 10th Grade – SSC	<b>Mumbai, Maharashtra</b> (2020)

SKILL SUMMARY

- Technical skills:** Food Product Development, Sensory Evaluation, Shelf-life Studies, Food Processing & Preservation, Nutritional Analysis & Labelling, Functional Foods, Food Rheology & Texture Analysis.
- Tools:** Canva, PowerPoint, Excel, Fusion 360
- Soft skills:** Excellent Communication, Presentation skills, networking, analytical thinking, creativity, multitasking.
- Language:** English, Hindi, Marathi, Gujarati, Sanskrit

EXPERIENCE

**CHITALE BANDHU MITHAIWALA**  
**Quality Assurance Intern (June – 2024 | June - 2024)**

- My work involved in ensuring that the company’s products meet the required quality standards. This includes tasks such as inspecting raw materials, checking the production processes, conducting product tests, and documenting results. The other task involved assisting in identifying defects, suggesting improvements and helping to maintain compliance with safety and regulatory guidelines.

**IIT ROORKEE**  
**Research and Development Intern ( July 2025 – October 2025)**

- My work involved ensuring that the developed products met the required quality and safety standards. This included inspecting raw materials, monitoring formulation processes, conducting performance and stability tests, and maintaining detailed documentation of results. I also assisted in identifying formulation issues, suggesting improvements, and ensuring compliance with safety, sustainability, and regulatory guidelines. During this internship, I contributed to two major projects:
- Millet-Based Edible Straw – A biodegradable, food-safe alternative to plastic straws, made using nutrient-rich millets.
- Teak Leaf-Based Smart Ink – A sustainable, non-toxic ink formulated from teakwood leaves for use in eco-friendly food packaging.

## PROJECTS

### DEVELOPMENT AND CHARACTERIZATION OF MILLET BASED SMART EDIBLE STRAWS.

- I developed a sustainable, millet-based edible straw aimed at reducing plastic waste in the food and beverage industry. This eco-friendly solution is biodegradable and nutritious, offering a practical alternative to single-use plastic straws. The project highlights innovation in food packaging by combining environmental benefits with consumer health. Characterization and quality analysis of these straws were performed

### DEVELOPMENT OF SMART EDIBLE INK WITH TEAKWOOD LEAVES FOR FOOD PACKAGING

- I created a smart ink made from teakwood leaves that is non-toxic, biodegradable, and ideal for sustainable food packaging and labelling. This innovative ink reduces reliance on harmful chemical-based inks and supports eco-friendly practices in the food industry. The project demonstrates a commitment to sustainable materials and environmental safety.

### DEVELOPMENT OF BIODEGRADABLE PACKAGING FILM USING WHEY

- Catering the problem of national-level hackathon, we developed a biodegradable packaging film using whey, promoting sustainable packaging solutions in the food industry. This project was recognized for its innovative approach toward reducing plastic waste and utilizing dairy industry by-products effectively.

### DEVELOPMENT OF A CLAY-BASED REFRIGERATOR USING EVAPORATIVE COOLING TECHNIQUE

- A clay-based refrigerator uses evaporative cooling, where water absorbed by porous clay evaporates, lowering the temperature inside. This eco-friendly, energy-efficient method doesn't require electricity, making it a sustainable cooling solution.

### DESIGNING OF FULLY AUTOMATED SAMOSA AND SHEV MAKING MACHINE

- We were awarded first place for designing an automated system for a samosa and shev-making machine in a competition organized by **Chitale Bandhu Mithaiwala**. Our team developed a fully functional model that demonstrated the operational mechanism of the machine, providing clear validation of its effectiveness. The design incorporated automation to streamline the production process, showcasing innovation and efficiency in food processing technology.

### DEVELOPMENT OF NO SUGAR, HIGH PROTEIN PINEAPPLE AND COCONUT ICE CREAM USING CHICKPEA AND CHIA SEEDS

- The development of a no-sugar, high-protein pineapple and coconut ice cream combines chickpeas and chia seeds as key ingredients. Chickpeas provide a plant-based protein source, while chia seeds add fiber and healthy fats, creating a nutritious, low-sugar alternative to traditional ice cream without compromising on flavour.

### DESIGN OF A SUSTAINABLE, RENERGY-CONSERVING PORTABLE REFRIGERATION SYSTEM

- This paper explores the design of a portable refrigeration system which will be sustainable, energy-efficient, and ideal for off-grid applications. These include uses in emergency medical transport, remote and rural communities, and fieldwork in isolated areas. To tackle these, the proposed design combines various innovative features such as wool wood insulation, a natural material known for its excellent thermal properties, with a water-circulated pipe grid that enhances its heat transfer. Collectively, these elements create a system that is highly efficient and also environment friendly.

(\* please visit my portfolio for detailed view of projects - <https://sites.google.com/view/aditigaikwad/home> )

---

## ACCOMPLISHMENTS

- 2nd prize - New Product development in World Food Day 2022 held in MIT ADT UNIVERSITY
- 2nd prize - Poster making competition organized by PFND AI in collaboration with SNTD college of home science.
- 1st prize - Internal smart India Hackathon Hardware category.
- 1st prize - CRIEYA Innosight Challenge 2024 (Ideathon) organized by Chitale Bandhu Mithaiwale at MIT ADT UNIVERSITY.
- 1st prize - Case Mania organized by MIT College of Management at MIT ADT UNIVERSITY.
- 2nd prize - Food Hackathon Organized by MIT School of Food Technology.

- 1st prize - In use your senses Challenge (Sensory Taste) organized by MIT School of Food Technology
- 29th ICFOST conference.
- 1<sup>st</sup> prize in Culinary clash Showcase.
- 3<sup>rd</sup> prize in Food Quiz.
- 1<sup>st</sup> prize - New Product development in World Food Day 2024 held in MIT ADT UNIVERSITY
- 3<sup>rd</sup> prize – poster presentation on engineers day 2024
- Paper presentation at 7<sup>th</sup> international symposium on innovative technology.