DEV LEKHADIA

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EDUCATION

Purdue University, West Lafayette, IN **May 2025**
BS Mechanical Engineering
Dean's List and Semester Honors Awardee (Fall 21', Spring 22')

Relevant Coursework:
- **Completed:** Thermodynamics, Linear Circuit Analysis, Statics, Linear Algebra, Differential Equations, Multivariate Calculus, ME Design Innovation and Entrepreneurship.
- **Currently Enrolled:** Mechanics of Materials, Dynamics, Manufacturing Processes I, Partial Differential Equations.

PROFESSIONAL EXPERIENCE

Engineering Intern – Kunal Organics **May 2023 - August 2023**
- Conducted research and experiments on various textile chemicals, such as surfactants, colorants, auxiliaries, and finishing agents, to test their performance and compatibility with different types of fibers and fabrics.
- Lead a team of four interns to control process variables and parameters for product quality and consistency.
- Used MATLAB to create and optimize an algorithm that analyzed the kinetic data of the textile chemical reactions and generated graphs and tables to compare the results.

Undergraduate Teaching Assistant – College of Engineering, Purdue University **August 2022 – May 2023**
ENGR 131** – **Transforming Ideas to Innovation I (Fall 2022)
- Graded and provided feedback to students on their homework, quizzes, and exams, and helped them with any questions or difficulties they had with the course.
- Assisted students in learning basic engineering concepts and skills using Microsoft Excel, Word, and PowerPoint.
- Collaborated with the instructor and other teaching assistants to ensure the smooth running of the course and the consistency of the grading criteria.

ENGR 132** – **Transforming Ideas to Innovation II (Spring 2023)
- Guided students with their MATLAB coding and written assignments, and helped them to debug and enhance their code.
- Worked with the graduate teaching assistant to assign tasks and responsibilities to the other teaching assistants and ensure the quality and consistency of their work.

Lead Student Worker – Panera Bread **January 2022 – May 2022**
- Collaborated with a 10-member team to analyze and visualize DORIS usability data during the COVID-19 pandemic, providing valuable insights into workplace usability.
- Coordinated and delegated tasks to student workers according to their availability, skills, and preferences.
- Handled customer complaints, suggestions, and inquiries in a courteous and respectful manner.

PROJECTS

Portable Folding Chair **January 2023 – May 2023**
- Developed a compact and portable solution for the seating shortage problem at Purdue University.
- Used NX Siemens and Fusion 360 to create a 3d model for the design, and 3d print the solution as a working prototype.
- Presented the solution among a panel of Industry Leading Engineers and Head of Mechanical Engineering Department.

Kinetic-Enzyme Test Data Analysis **January 2023 – May 2023**
- Lead a team of four students and coordinated the tasks of data collection, processing, visualization, and interpretation.
- Analyzed the kinetic enzyme test data and used MATLAB to generate graphs and tables comparing the reaction rates of five new generation enzymes for commercial detergent making.
- Applied the Michaelis-Menten equation and the Lineweaver-Burk plot to calculate the maximum velocity (Vmax) and the Michaelis constant (Km) values of each enzyme and determine their efficiency and specificity.

Paper Towel Recycling System for Kimberly Clark **August 2022 – December 2022**
- Created a high-fidelity prototype of the paper towel recycling system using 3D CAD models, animations, and simulations to demonstrate the realistic appearance, performance, and user experience of the system.
- Used user testing and feedback methods to evaluate and improve the design of the paper towel recycling system based on the low fidelity and high-fidelity prototypes.
- Presented the final design of the paper towel recycling system to Kimberly Clark using a portfolio that showcased the prototypes, the design process, and the design rationale.

SKILLS AND INTERESTS

Skills: NX Siemens, Fusion 360, MATLAB, Python, Microsoft Office 365 (Word, Excel, PowerPoint, Teams, etc.)
Interests: Table Tennis, Robotics, Chess, Boxing, Baking, Trivia, Singing.