Srisha Rewatkar

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Education

University of California, Berkeley
B.S. Mechanical Engineering, B.A. Data Science with Aerospace Minor *Expected Graduation: May 2026*

Skills:

- **CAD & Design:** SolidWorks, CATIA GSD, AutoCAD
- **Simulation & Analysis**: FEA, CFD (Ansys), Structural Analysis, Mechanical Properties of Materials
- **Manufacturing & Design**: GD&T, Design for Manufacturability, Additive Manufacturing
- **Programming:** MATLAB, Python, Java, ImageJ
- **Software:** SolidWorks, AutoCAD, Ansys (CFD & FEA), ImageJ
- **Languages:** English, Spanish, Hindi, Marathi, Sanskrit

Relevant Experience

Mahindra Automotive North America | Body, Closures, and GSM Intern
May 2024 – July 2024 *Auburn Hills, MI*

- Improved ergonomics of inner door handle using ergonomic principles and FEA analysis to enhance user interaction, accessibility, and minimize costs while retaining performance.
- Optimized structural integrity of Body-in-White (BIW) components and refined designs (e.g., drain hose) using CATIA GSD and A2MAC1 benchmarking tools, focusing on eliminating interferences and analyzing competitors' BIW cross sections for SUVs.

Formula SAE Electric at Berkeley | Aerodynamic Structures Engineer
Aug 2023 – Current *Berkeley, CA*

- Secured top 20 placement in the Design Event and 2nd place in the Cost Event by optimizing design and cost-saving proposals with minimal performance impact.
- Engineered and validated rear wing mounting rods using SolidWorks, Ansys FEA & CFD, and GD&T to minimize aerodynamic disruption and ensure structural integrity, accuracy, and manufacturing efficiency.

Theoretical & Applied Fluid Dynamics Lab | Undergraduate Design & Manufacturing Researcher
August 2024 – Current *Berkeley, CA*

- Design rigid airfoil sails and structural elements on autonomous survey drones capable of precision maneuvering using rapid prototyping for energy-efficient marine navigation and surveying
- Secure highly competitive NSF I-Corps training and funding to connect research to consumers and develop start-up.

Projects

- **Drag Reduction System (DRS) for FSAE:**
  Developed autonomous DRS to enhance battery efficiency and speed in Electric FSAE car, utilizing ESP32s, MicroPython, and real-time data from sensors for performance optimization.
- **Wind Turbine & Tower**:
  Designed a high-efficiency wind turbine, optimizing airfoil lift-to-drag ratio and producing 1.2 W with a 5 cm blade length; engineered support tower for minimized aerodynamic penalty and increased stiffness.
- **Universal Car Parking Assistance Device**:
  Developed a customizable LED triangulation-based car parking assistance system for universal application.
- **Affordable Mobility Aid**s:
  Awarded Rs. 10,000 scholarship for designing a portable, safe, affordable elderly mobility aid with recycled materials; led team to win gold medal at National Business Idea challenge.
- **Modelling Dynamics of Thin Films**:
  Developed laser-based experiments to study thin film thickness changes and built a model for thickness evolution using data analysis in Jupyter Notebooks.
- **Forensic Droplet Spatter Analysis:** Used ImageJ and Python to model spatter diameter in relation to viscosity, height, and surface tension for forensic applications.