

## **Nihal Narayanan**

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## **EDUCATION**

### **BITS Pilani — B.E. Mechanical Engineering**

Expected Graduation: 2028

CGPA: 7.16/10 (after 3 semesters)

## **TECHNICAL SKILLS**

- **CAD & Simulation:** SolidWorks, ANSYS
- **Programming & Technical Tools:** MATLAB, Simulink
- **Engineering Areas:** Mechanical Design, Topology Optimization, Pressure Vessel Analysis

## **RELEVANT COURSEWORK**

- Engineering Graphics and Design
- Thermodynamics
- Mechanics of Solids
- Engineering Optimization
- Manufacturing Processes
- Dynamics
- Mechanisms and Machines
- Materials Science and Engineering

## **PROJECTS & RESEARCH**

### **Enhancing Gas Barrier Properties of Type IV Pressure Vessel Liners for Hydrogen Storage Applications**

*Jan 2026 – Present*

- Working on a study-oriented research project under faculty supervision.
- Exploring material and liner performance improvements for hydrogen storage applications.
- Studying engineering challenges related to pressure vessel efficiency and gas permeability.

## **SAE Simulation Work using ANSYS**

*Jan 2026 – Present*

- Worked on topology optimization and SAE-related engineering simulations using ANSYS.
- Gained exposure to engineering modeling, optimization workflows, and simulation-driven design approaches.
- Developed understanding of structural analysis and technical problem-solving in engineering applications.

## **CERTIFICATIONS**

- MATLAB Onramp Certification
- SolidWorks Course Completion
- MATLAB & Simulink Course Completion

## **AREAS OF INTEREST**

- CAD Design
- Mechanical Core Engineering
- Simulation & Analysis
- Product Design
- Engineering Research