

Vikas Budda

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EDUCATION

Nadimpalli Satyanarayana Raju Institute of Technology Vishakhapatnam, Andhra Pradesh
Bachelor of Technology (B.Tech), Mechanical engineering — CGPA : 7.08 2020 – 2023

Sai Ganapathi Polytechnic College Vishakhapatnam, Andhra Pradesh
Diploma in Mechanical Engineering — CGPA : 8.5 2017 – 2020

EXPERIENCE

Design Engineer June 2023 – Sep 2025
Taal Tech Bengaluru

- Designed and modified aircraft interior components using **CATIA V5/SolidWorks**, ensuring design integrity through detailed evaluations, fit checks, and adherence to FAA certification standards.
- Utilized **Solidworks/CATIA V5** workbenches, Part Design and Generative Sheet Metal, to accurately create, modify, and manage components for complex aircraft interiors, ensuring compliance with design specifications.
- Applied **Geometric Dimensioning and Tolerancing (GD&T)** principles to create accurate and complete Engineering Drawings for manufacturing and assembly.
- Managed and controlled design data (part data and revisions) across the project lifecycle using **Enovia SmarTeam (PDM)**, ensuring accurate configuration management and traceability.
- Authored and reviewed **Custom Material Test Reports, Seat/Divan Material Reports, Additive Manufacturing Substantiation Reports, and Fire Containment Analysis** ensuring design adherence to FAA flammability requirements. Automated documentation workflows using Excel VBA with AI-assisted scripting, cutting manual processing time by 30%.

PROJECTS

Academic Project – Design and Fabrication of Beach Cleaning Vehicle Jan 2023 – Apr 2023
AutoCAD / CATIA V5, Mechanical Design, Fabrication

- * Designed and developed an **eco-friendly beach cleaning vehicle** aimed at automating waste collection and reducing manual labor. Created detailed **2D and 3D CAD models** in **AutoCAD / CATIA V5** covering frame, conveyor, and sprocket–drive systems. Performed **mechanical linkage and load distribution analysis** to ensure reliable and efficient debris collection. Fabricated and validated a working prototype using locally sourced materials; verified design functionality under real conditions.

Self-Driven Project – Hydration Puck (Product Development Prototype) Sep 2025 – Oct 2025
Siemens Unigraphics NX Cad, Additive Manufacturing, Embedded Systems, Product Design

- * Conceptualized and developed the **Hydration Puck**, a compact smart hydration tracker integrating electronics and enclosure design. Modeled and refined the product in **Siemens Unigraphics NX Cad**, optimizing for precision fit, compactness, and manufacturability. Procured, wired, and soldered all **electronic components**, ensuring functional integration with sensor and display modules. Fabricated multiple prototypes via **3D printing (Bambu Lab A1)** to evaluate assembly tolerances, ergonomics, and aesthetics.

CERTIFICATIONS

Certified SolidWorks Associate (CSWA): Dassault Systèmes *Nov 2025*
Solidworks: Guvi *Nov 2025*
PYTHON ESSENTIALS: Cisco Networking Academy. *Dec 2023*
Autocad: Indo-German Institute of Advanced Technology *May 2017*

TECHNICAL SKILLS

CAD & Design Tools: AutoCAD, Siemens Unigraphics NX CAD 2007, SolidWorks, CATIA V5, Blender
PLM & Data Management: Enovia SmarTeam, Dassault Systèmes 3DEXPERIENCE Platform, Teamcentre
Analysis & Manufacturing: ANSYS (Structural Analysis), 3D Printing (Bambu Lab A1), Design for Manufacturing (DFM), GD&T fundamentals
Automation & Scripting: NX CAD macros, CATIA VBA macros (AI-assisted scripting), Excel VBA