

Dande Dhanesh Kumar +919381263541

B.Tech - Indian Institute of Technology Tirupati, India

Portfolio Github Linkedin dandedhanesh899@gmail.com

Education Details

Program	Institute	Year	%/CGPA
B.Tech - Mechanical Engineering	IIT Tirupati	2024	8.27/10
Higher Secondary Education	Abhyas Junior College, Proddatur	2020	98.1%
The Board of Secondary Education	Sri SreeVani Vidyalayam, Proddatur	2018	10/10

Technical Proficiency

Technical Skills : C++, JavaScript, TypeScript, Data structures and Algorithms, Object-

oriented programming, Java(familiar), Python(familiar)

Tech Stack : React.js, Node.js, Express.js, Mongoose, MongoDB, Tailwind CSS,

Socket.io, WebRTC, SQL, HTML, CSS, Serverless, Docker, Nginx, Redis

Softwares & Tools : Android studio, Visual Studio, MS Office, Ansys, Creo, Git

Experience

• Genetic Algorithm Intern, BluJ Aerospace

[May 2023 - July 2023]

[Guide : Utham Kumar Dharmapuri]

• Propulsion system analysis of an e-VTOL aircraft using Genetic Algorithm.

Developed a **genetic algorithm** for a 6 propeller e-VTOL airraft using C++, which estimates the thrust forces required from the motors to balance the airraft in hovering conditions. This work revealed that the **motors chosen are inadequate to generate sufficient thrust** in the presence of a propeller failure and a shift in CG w.r.t center of lift.

Projects

• StudyNotion [website & Source code]

[April 2023 - June 2023]

- Built a full stack EdTech platform using MERN stack and Tailwind CSS with authentication and authorization, storing user data in MongoDB Altas. Razorpay is integrated for payment options and cloudinary is to store media. Made 30+ APIs to connect backend functionality with frontend.
- Zoom Clone [Source code]

[January 2024]

- Built a real-time video calling application using ReactJs, NodeJs, ExpressJs and webRTC, Socket.io.
- Shopping website [website & Source code]

[September 2023 - October 2023]

- Designed and built a full stack e-commerce website using MERN stack and Tailwind CSS with authentication and integrated razorpay payment options.
- BluJ Aero [website]

[June 2023]

 Designed and built a website using React and Tailwind CSS for an aerospace startup, BluJ located in Hyderabad and, hosted the website on Godaddy.

Relevant Courses

• Data Structures and Algorithms in C++

• MERN Stack

Achievements

- Cleared 2 rounds of IICC conducted by AICTE and came into waiting list for final round.
- Currently ranked 4th in GFG in IIT Tirupati institute section.
- Secured a rank of 283 in EAMCET

Positions of Responsibility

Multi media team

• Worked in mutli media team as a core member for tirtsava, a techno cultural fest of IIT Tirupati.