#### Dixita A. Yadav

Mechanical Engineering | Don Bosco Institute of Technology | Mumbai University Mumbai, Maharashtra - 400011 | +91 7021936588 | dixtav01@gmail.com

#### **Academic Details**

Don Bosco Institute of Technology, Mumbai, India	Bachelor's Degree in Mechanical Engineering	2024
Elphinstone Fort College, Mumbai, India	Junior College	2020
St. Ignatius High School, Mumbai, India	High School	2018

## **Areas of Interest**

- Material Extrusion based Additive Manufacturing (MEAM)
- Biomedical Devices
- Optical Systems for Space Applications

## Experience

1. Space Application Center (SAC),

Indian Space Research Organization (ISRO), Ahmedabad.

(June 2023- September 2023) Researcher

- Design and development of Electro-Opto Module (EOM) for space exploration satellites.
- Assisted in CAD modeling, structural integrity and thermal analysis.
- 2. Biomedical Engineering and Technology Innovation Centre (BETiC) Lab,

Indian Institute of Technology - Bombay (IITB), Powai, Mumbai.

(January 2023 - February 2023) Research Intern

- Conducted systematic survey for the development of *smart splints*, a biomedical device to assist in healing fractures.
- 3. Rapid Manufacturing (RM) Lab,

Indian Institute of Technology - Bombay (IITB), Powai, Mumbai.

(June 2022 - August 2022) Project Intern

- Assisted in development of a Cable Driven Parallel Robot (CDPR).
- Contributed in the development of an Electric Hammer for Stress Relieving in metal AM.
- Conducted Systematic Research & Analysis on GARUDA (The Manned Drone Project).
- 4. The Indian Railways, Parel, Mumbai.

(February 2022 - March 2022) Visiting Intern

- Exposure to the overhauling cycle of Loco Diesel Electric Engines, and Shunting Engines.
- Inspection of Turbo Machineries, ICFs, LHBs, FIPs and Traction generators.

## **Projects**

- 3-Axis Scissor Kinematics based Motion System.
- Spacetronauts- UI/UX Design & Game Development. (Available on Playstore)

## **Publications**

Hemant Hogade, Dixita Yadav, Varad Kadam and Abhishek Dagade, "An Investigation of Threaded Insert Performance in Additively Manufactured Parts", In 9th International & 30th All India Manufacturing Technology, Design and Research Conference (AIMTDR), Indian Institute of Technology (IIT) BHU, Varanasi, India. (*Under Review*)

# Positions of Responsibility

- Mad-Gear Motorsports Club, DBIT- Treasurer & Admin Head, Social Media Manager, Founding Member.
- Xanthium Racing, DBIT- Chassis Head.
- Literary Society, DBIT Head Designer.