# VISTASP AFRID EDULJI

#### **EDUCATION**

#### K.J. Somaiya College of Engineering, Mumbai University, India

August 2018 – May 2022

Bachelor of Technology - Mechanical Engineering , GPA: 9.40 / 10.00

Relevant Coursework: Mechatronics, Robotics and Artificial Intelligence, Project Management.

#### **SKILLS**

**Programming Languages & Libraries:** MATLAB, Python, C/C++ OpenCV

Software Tools & Hardware: AutoCAD, SolidWorks, Creo Parametric, Ansys Mechanical & Fluent, Cura,

Microsoft Excel, Adobe After Effects, Adobe Premiere Pro, Arduino, Raspberry Pi.

**Technology Experience:** Laser Cutting, 3D Printing, 3D Scanning, Metal forming and fabrication,

CNC Machining and Turning. English (Written and spoken),

**Languages:** English (Written and spoken), Hindi (Written and spoken),

Marathi (Written and spoken),

Gujarati (spoken)

## TECHNICAL PROJECTS

• Excel Skills for Business: Essentials [Certificate]

- Excel Skills for Business: Intermediate I [Certificate]
- Introduction to Programming with MATLAB [Certificate]
- Introduction to Image Processing [Certificate]
- Dassault Systèmes Mechanical Design Associate [Certificate]
- Deep Learning Onramp [Certificate]
- Optimization Onramp [Certificate]
- Simulink Onramp [Certificate]
- Euclidean Tensor Algebra for Engineers [Certificate]

#### WORK EXPERIENCE

#### Methods Engineer at Godrej and Boyce Mfg Co Ltd, Aerospace division

Oct 2022 - Present

As part of my job I am contributing towards building India's first indigenously manufactured Gas-Turbine Engine and manufacturing the first of its kind carbon-fibre based UAV under Make in India initiative. I have been closing working with international corporates such as GE Aerospace, Honeywell Aerospace, Safran, Boeing, Rolls-Royce, and Israel Aerospace Industries, manufacturing for them, various sheet metal components, tubing and machined parts.

### TECHNICAL PROJECTS

#### Carbon-fibre based drone assembly

• My second project is to build a Carbon-Fibre based large sized drone. In the project, I have worked on the assembly of various parts from child to parent assembly stage with the goal of integrating all parts into a single uniform assembly.

#### **Gas-Turbine Engine Manufacturing**

• During my career, I have worked on the manufacturing of India's first indigenously manufactured Gas-Turbine Engine. Primarily, I have been in charge of the process planning and execution of several sheet metal components for the same. In addition I have also worked on several tubing's, machined parts and welded assemblies.

# LiDAR-based cap for the blind

• I worked on the development of a LIDAR based cap that utilizes a combination of 1-D & 2D LIDARs and depth and image cameras to help map and navigate indoor environments in order to help blind people navigate under the mentorship of Dr. Ninad Mehendale.

# Design of Rover (Capstone Project) [Report]

• Designed and manufactured a 6-wheeled robot with the capabilities of semi-autonomous navigation using stereo vision for collision prevention, remote sensing, and data transmission using under the supervision of Dr. Sangita Bansode and Prof. Arati Phadke. The project was an original concept floated by my team and myself. For the successful execution of the project, i.e. design, fabrication and demonstration of working capabilities, we were awarded a grant of INR. 10000, becoming one of only five groups to receive the grant.

#### Image Transfer using Arduino and RF [Github]

• A personal project that I worked on. It utilizes RF boards connected to two separate Arduino boards. The boards are connected to the host and receiver PCs that run custom helper python codes that facilitates the transfer of the image from one PC to another.

### Team Onyx India - Aeromodelling team of KJ Somaiya College of Engineering [Video]

• Team Onyx India is the official aero-modelling team of K. J. Somaiya College of Engineering that designs builds and flies its own RC aircraft with a goal to participate in the annual SAE Aero Design Competition in the US. I was orig anally a part of the aerodynamics team and later graduated to team captain. During my time at the helm I navigated a tenuous period during the pandemic and lead my team to its first participation in the advanced class of the competition, undertaking a challenge never seen before for us. For our efforts we placed 6th globally among 22 teams.