

DEBARGHA BISWAS

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National Institute of Technology Karnataka

Bachelor of Technology in Mechanical Engineering

- CGPA: 8.68/10.00 (post third semester)

Expected 2022 - 2026

SKILLS

Languages

MATLAB, Python

Technologies

Autodesk Fusion 360, ANSYS Fluent, Simulink, NumPy, Matplotlib, Pandas

Relevant Courses

Material Science & Engineering, Mechanics of Deformable Bodies, Basic Engineering Thermodynamics, Fluid Mechanics and Machinery, Mechanics of Machinery, Basic Manufacturing Processes, Numerical Methods, Supervised Machine Learning: Regression & Classification by Dr Andrew NG

PROJECTS

CapStone Project – NITK-Surathkal, Department of Mechanical Engineering

Oct 2023 - Present

CapStone Project under the guidance of Dr. Khyati Verma. Working on the conception of a wearable device that will allow the user to assess and aid with Parkinson tremors in a cost effective and accurate manner. Currently researching sensors required and working on a CAD model of the device with plans to incorporate AI/ML into the system for improved results.

Course Project – Mechanics of Machinery (ME203)

Kinematic Analysis for the Beam Engine, Oscillating Cylinder and Crank Slotted mechanisms with the help of MATLAB to animate the configuration diagram, velocity diagram, acceleration diagram, dynamic force diagram of the mechanisms and find out the values at various instances.

CO-CURRICULAR ACTIVITIES

Analysis of Wind Turbine Designs in ANSYS

Jan 2023 – May 2023

IEEE Envision Project

- Analysing the design of wind turbines with the help of computer-aided methods to establish efficient design types and find their efficiency based on certain given conditions, followed by simulating real-world conditions to see if they are feasible and if they will hold up.
- Used ANSYS Fluent to perform CFD analysis on the turbine blade followed by ANSYS Workbench to perform static structure testing on the blade.

CERTIFICATES

- **MATLAB Onramp**
<https://matlabacademy.mathworks.com/progress/share/certificate.html?id=4add3fac-fe33-439a-a3e8-f7612e86d717&>
- **Simulink Onramp**
<https://matlabacademy.mathworks.com/progress/share/certificate.html?id=89fb5959-c62f-4269-8ab0-f046e1ad1dd6&>