



Aditya Jaiswal

Roll No.:2211MT02

MTech-Mechatronics Engineering

Indian Institute Of Technology, Patna

+91-8576818161

aj8576818161@gmail.com

aditya_2211mt02@iitp.ac.in

linkedin.com/in/aditya-jaiswal-01a395184/

EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
M.Tech.(Mechatronics)	Indian Institute of Technology, Patna	7.58 (Current)	2022-Present
B.Tech.(Mechanical)	Kamla Nehru Institute of Technology, Sultanpur	8.01	2017-2021
Senior Secondary	CBSE Board	87.0%	2016
Secondary	CBSE Board	95%	2014

INTERNSHIP

- **Leaf spring failure prediction of Suspension of automobile (VOLVO GROUP BANGLORE)** AUGU
Description: Level sensor and IMU sensor for recording deflection and tilting data, enabling real-time monitoring of stress fluctuations.
– **Algorithm used:** Rainflow counting algorithm for calculating no. of stress cycle for fatigue
– **Tools Used:** Matlab Simulink, Solidworks, Ansys, Jupyter Notebook(for data visualisation)
- **Development and Fabrication of a Robotic Fish with Integrated CAD Model and Electronic Components** Sep.2022
Project Description: The robotic Fish incorporates an Arduino Nano microcontroller, a voltage regulator, and servo motors.
- **Position Control of DC Motor using PID Controller with Bluetooth Interface(Control System)** Sep.2022
Project Description: It employs an Arduino microcontroller with Bluetooth communication to regulate the position of the DC motor.
- **Malaria Disease Detection(Deep Learning Approach)** Sep.2022
Project Description: Develop a deep learning-based solution for detecting malaria disease using a CNN architecture.
– **Dataset Used:** This Dataset is taken from the official NIH Website: <https://ceb.nlm.nih.gov/repositories/malaria-datasets/>
- **Object detection and tracking(Deep Learning and Computer Vision)** July 2023
Project Description: It detects the hand and segments and counts the number of fingers being held up
Library used: Open CV, TensorFlow, Pandas, Numpy

KEY COURSES TAKEN

- Manufacturing and Industry 4.0, Sensor and Actuator, Modelling of mechatronics system, Control system, Machine Learning, Deep Learning(ANN, CNN, RNN(LSTM, GRU), Computer Vision with Open CV, Python

TECHNICAL SKILLS

- **Design Software and Simulation Tools:** Solidworks, Matlab Simulink, Robodk Simulation
- **Electrical Software and tools:** Tinkercad, PLC Fiddle, Eagle
- **Deep Learning and Machine Learning Libraries/Frameworks:** Tensorflow, Pandas, Numpy, scikit-learn, Matplotlib, Seaborn
- **Programming:** Python, Object Oriented Programming, Basics of C, SQL, Matlab

CERTIFICATIONS

- **Complete tensorflow and Keras Deep learning Bootcamp** *Course Instructor: Jose Portilla*
- **Python for Computer vision with Open CV and Deep Learning,** *Course Instructor: Jose Portilla*
- **Complete Python with Object oriented Programming** *Course Instructor: Durga Software Solutions*

ACHIEVEMENTS

- **Secured AIR 255 Rank** I secured an impressive all-India Rank of 255 in the GATE examination conducted by IIT Kharagpur. 2019

POSITION OF RESPONSIBILITY

- Teaching Assistant(TA), IIT Patna 2023-2024
- Member of Teach for Technocrats(TFT) college council in KNIT, Sultanpur