

CURRICULUM VITAE

SURAJ SINGH PATWAL Phone No: +91-8433093733

House no.54, lane no. 7 Email: Suraj 1911mt12@iitp.ac.in
,Khandoli canal road, Dehradun patwalsuraj11@gmail.com

OBJECTIVE

To maintain learning and working environment within organization and try to give all my hard work best efforts to the organization.

EDUCATION

Duration	Institute	Course	Degree/Board/ Certificate	CGPI/%age
2019-2021	Indian Institute of Technology, Patna	Mechatronics	M.Tech	7.92/10
2011 to 2015	National Institute of	Mechanical	B.Tech	7.82/10
	Technology Hamirpur	Engineering		
2010	K.V.N.E.R. Izzatnagar, BAREILLY	PCM	12 th /CBSE	84.33%
2008	K.V.N.E.R. Izzatnagar, BAREILLY	Maths,	10 th /CBSE	72.6%
		Science		

WORKING EXPERIENCE

- Worked as a GET for 10 months at ISGEC Heavy Engineering Yammunanagar, Haryana from 20-07-2015 to 30-05-2016.
- Working as intern with Intellipaat from 11-09-2021 to present.

PUBLICATION

 INNOVATORS at SemEval-2021 Task-11: A Dependency Parsing and BERT-based model for Extracting Contribution Knowledge from Scientific Papers. (Venue: ACL|IJCNLP|SemEval)

CERTIFICATION

 Attending course: Advanced certification in data science and AI by IIT Madras and Inteelipaat.

TECHNICAL SKILLS

- Machine learning, Deep-learning, Data Cleaning, Data Manipulation, Data Visualization.
- Keras, Pandas, Numpy, Scipy, Scikit learn, SQL, Power BI, MongoDB, Sqllite, Tableau, Flask.
- Python, C.
- Autocad, Catia, Creo, Solidworks.
- Excel, Ms- Word, Power point.



PROJECTS UNDERTAKEN

- Worked on a project which is "Detection of Covid-19 in a patient using Chest X-ray" The project involves the classification of chest X- rays into normal, pneumonia, and covid-19 patient using deep learning techniques, in which we use 2 approaches, In the first one we use transfer learning on DenseNet121 which is pretrained on imageNet dataset which give us the accuracy of around 90.3% and in second approach we use capsule network to classify the X-rays and get the accuracy of 94%.
- Worked on "NLPContributionGraph tasks using ORKG dataset for SemEval2021 competition"
 It involves the use of the ORKG dataset to classify the sentences into contributing one or non-contributing one, then extraction of scientific phrases from the contributing sentences and classifies them into information unit, finally extract their triples.
- "Credit card Fraud Detection" It is completely a class imbalanced problem, analysis the dataset
 and first uses the machine learning algorithms, Grid Search hyperparameter tuning technique
 to predict that a person is fraud or not, second uses imbalanced -learn library to do the under
 sampling and over sampling and Smote technique to increases the accuracy, precision, recall
 and F1-score of the model.
- Worked on a project of Digital image processing which is "Classification of MNIST Handwritten Digit Database using Neural Network".
 Project involves as it is implementation of research paper which contains use of models like 1) Ordinary neural network. 2) Convolutional neutral network (LeNet-5). 3) Ordinary Autoencoder with simple neural network. 4) Convolutional Autoencoder with convolutional network to train and test the data on MNIST handwritten Digit Database.
- "Analysis of census dataset and check which classification model will help us to figure out
 which set of people are having annual income greater than 50K or less than 50K."
 Handling the null data, and perform exploratory data analysis on the updated dataset, split
 the dataset into train and test, apply various classification machine learning algorithm and
 check performance of each model by looking at the classification report of each model.
- Worked on a project of machine learning, which is "Classification of 100 reading of gas sensor
 into three classes named banana, wine and background based on the prediction of model which
 is trained on given dataset".
 - In which we are provided with 2 tables contain different sensor readings (8 gas sensors, humidity and temperature sensor) followed by merging of both the tables into one then applying Decision tree algorithm and get the accuracy of 99.98%.