

GAURAV GUPTA | 16HS20013



ECONOMICS (M.Sc. 5Y) MICRO SPL. in ENTREPRENEURSHIP AND INNOVATION, INTELLIGENT LEARNING SYSTEM DESIGN

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Year	Degree/Exam	Institute	CGPA/Marks
2021	M.SC(5YR)	IIT Kharagpur	7.52/ 10
2015	Senior Secondary Examination	RBSE	82.80%
2013	Secondary Examination	RBSE	86%

INTERNSHIPS AND PROJECTS

Voice Analytics Intern | Edelweiss Tokio Life Insurance | Mumbai

May'19-Jul'19

- •Built an unsupervised algorithm to determine the Voice Sentiment by extracting audio features to determine emotion by valence curve
- •Used Hidden Markov Model, Neural network, SVM model, to make cluster of similar voices and extracted audio features for training
- •Improved the precision of model to **76.14%** to correctly flag the calls based on sentiments and that of **79%** for **speaker diarization**
- Presented the demo working code to test over live calls. Got recommendation letter from Vice President and Chief Manager, Analytics

Artificial Intelligence Intern | Landryt | Bengaluru

Apr'20-Jun'20

- •Built an Integrated NLP based search engine to identify the entities of users in the land judgment records for the Karnataka state
- •Used Image processing, OCR, OpenCV and Canny Edge detection, application of sobel and gaussian filter on images to find entities
- •Built a custom NER model using Spacy, train Encoder and decoder, LSTM for identification and text sentiment classification
- Achieved a precision of about 83% for the text and 94% on image classifier using CNN (VGG16 architecture) to classify image category

Research Intern | Prof. Adrija Majumdar | IIM Ahmedabad

- •Performed Sentimental analysis on scrapped post of wallstreetbets from reddit platform to predict the behaviour of gamestop stock
- •Build NLP algorithm to forecast whether reviews affects prices behaviour, made guided LDA model, loughran-mcdonald sentiment over post

Bike Rental Forecasting | Prof. Buddhananda Banerjee | IIT Kharagpur

Oct'18-Nov'18

- •Forecasted demand for bike rental on time series data by applying methods such as ARIMA, Holt's winter method, Random Forest
- •Carried out Feature Engineering making series Stationary (Unit root) and taking account for Multicollinearity and Heteroskedasticity
 •Built Boosting Trees(XGboost, Gradient boosting algorithms) to improve MCC score and identify the structural breaks present in series

COMPETITION/CONFERENCE

Credit Risk Prediction | IIM Udaipur

Apr'18-Jun'18

- Developed a Statistical model to predict short-term credit ratings of the companies using default ratios and risk measures like alfa, beta
- •Scraped the data from bloomberg and carried out **Feature engineering** of the time series data and built a **regression model** for prediction •Improved the accuracy of the model to **78%** to correctly depict ratings based on their **probabilities of default** and classify accordingly

Sentiment analysis | Interhall Data Analytics | IIT Kharagpur

- Designed an algorithm to carry out sentimental analysis for the reviews of insurance firm by using Bi-directional LSTM model
- •Train a word embedding model word2vec (CBOW model) on specific data for generating better predictions based on different classes

Case study Competition | Techniche | IIT Guwahati

Jan'18-Feb'18

- •Finalist in the case study competition, sterilized the growth of MSC cruise industry with cost effective strategies to compete and expand
- Applied various frameworks including SWOT analysis, AHP, BCG matrix and break even point to strengthen and areas to expand

SKILLS AND EXPERTISE

- •Programming Languages : C/C++ | Python | R | Stata | SQL •Libraries/ Tools : Keras | Git | Opencv | Bloomberg | Scikit Learn •Areas : Algorithms and Data Structures | Data Analytics | Machine Learning | Deep Learning | Statistical Modelling

COURSEWORK INFORMATION

- •Analytics: Regression and Time Series | Econometrics Analysis | Machine Learning | File Organisation and Database System
 •Mathematics: Probability and Statistics | Non Linear Programming | Partial Differential Equation | Linear Algebra | Financial Management
 •Computer Science: Data Structures | Design and Analysis of Algorithms | Natural Language Processing | Deeplearning.ai Specialization*

Leadership Experience

President | ShARE IIT Kharagpur Chapter

Aug'19- May'20

- •Led a **team of 30+ members** working across **5+ networks** in india and organised workshops on case studies, economics and analytics •Strategized growth of ShARE, collaborated with Corporate and initiated partnership with firms for team to work on real live projects

Vice-Captain, Case Study | RK Hall of Residence | IIT Kharagpur

Jul'18-Apr'18

- •Led a team of 20 member for inter-hall case study team of RK Hall in GC 2018-19, conducted workshops to enhance technical capabilities
- Created a case repository and organized case study workshops to familiarize the team with different case solution approaches

AWARDS AND ACHIEVEMENTS

- •Cleared the B.Math examination conducted by Indian Statistical Institute-2016 among 2 lakh of appearing candidates (99.9 percentile)
- •Secured Gold in Mathematics Olympiad and Silver in Ad Design competition in General Championship, Technology Gymkhana in 2017
- •Cleared NCFM financial risk management paper and secured 92 percentage conducted by National Stock Exchange, Mumbai

EXTRA CURRICULAR ACTIVITIES

- •Tech : Being the Secretary, Technology conducted workshop related to tech for General championship, managed budget of INR 20000
- Social: Participated in Blood donation camps and Awareness Rallies conducted by Bharat Viskas Parishad on National Blood Donation Day
- •Fundraiser: Raised a fund of INR 60000 as part of Phonathon 3.0, an initative to get an financial aid for development of the institute