

Academic Qualifications			
Year	Qualification	Institute	CPI/%
2020-2022	M. Tech, Industrial & Management Engineering	Indian Institute of Technology, Kanpur	9.11 * CPI
2012-16	B. Tech, Mechanical Engineering	GLA University, Mathura(U.P.)	9.49 CPI
2011	Class XII CBSE Board	Maharishi Vidya Mandir, Fatehpur(U.P.)	84.2%
2009	Class X ICSE Board	Playway English School, Fatehpur(U.P.)	78.57%

up to 2nd semester**Summer Internship****Machine Learning Intern- BrainAlive Research Private Limited**

2.5 months (May 2021- July 2021)

Research and Analysis of Eye Gaze Estimation Methods:

- Studied several research articles of last 15 years which were relevant to human Gaze estimation.
- Obtained a deep understanding of gaze tracking fundamentals (like **Fixation**, **Scanpath**, **Saccades**, etc.), eye gaze tracking methods (such as **PCCR** model-based methods, **appearance-based** methods), various **CNN-based** architectures (**VGG-16**, **AlexNet**, **RESNET** etc.), paradigms of collecting data, real-time applications, etc.
- Prepared a detailed **literature review** discussing gaze tracking fundamentals, feature extraction, methodologies to estimate gaze, calibration, devices and platforms, real-time applications in different domains.

Work Experience**System Engineer- Infosys Limited, Chandigarh**

(Mar'17-Dec'17)

- Responsible for removing errors in an already deployed project- Client Sierra Wireless.
- Presented weekly service reports to the senior leadership, knowledge sharing sessions to the team.

Graduate Engineer Trainee - TexCorp Limited, Gurugram

(June'16-March'17)

- Responsible for maintenance of heat setting machine in dyeing department.
- Rebuilt a heat setting machine from scrap.
- Successfully implemented the dependency of heat setting machine from electric heater to Thermic fluid.

Coursework and Skills

Relevant Courses Statistical Modeling for Business Analytics | Applied Machine Learning | Marketing Research | Time Series Modeling for Business Analytics | Operation Research | Probability and Statistics | Data Mining

Technical Skills PYTHON (NumPy, Pandas, SciPy, Sci-kit Learn, Seaborn, Matplotlib, Statsmodels) | JAVA |MS Office | SQL | Machine Learning | Natural Language Processing | SPSS

Academic Projects:**Analyzing efficacy of eLearning at IIT Kanpur-Marketing Research**

(Feb'21 – May'21)

- Conducted a Problem Identification Research to analyze & identify salient features of eLearning at IITK
- Formulated Management Decision & Market Research problems, Research Questions, and Hypotheses
- Designed a Single cross-sectional descriptive research, dynamic survey form using Scaling techniques
- Collected 200+ sample data (primary) using online surveys, focus groups & personal interviews
- Carried out Exploratory, Descriptive Research in SPSS on the data (Convenience Random Sampling)
- Analyzed the data using statistical (parametric & non-parametric) tests (One /Two Sample t-test, Chi squared test) to verify hypotheses.

Forecasting of CO₂ Emissions by Electricity in USA-Time Series Modelling for Business Analytics

(Jan'21 – Mar'21)

- Predicted Co2 Emissions in USA for next 6 months using time series techniques.
- Performed Exploratory Data Analysis (EDA) to identify Seasonality, Trend and Stationarity in data.
- Statistically tested for stationarity, trend and seasonality using ADF-test, KPSS-test & Decompose Plot.
- Applied Holt Winter's Additive Model and SARIMA model for forecasting the emissions, with p,d,q values being inferred using PACF and ACF test and plots.
- Among all the models applied the Holt's Winter Model gave best predictions with RMSE value of 6.0242.

Predicting quality of Red Wine using Statistical Regression Models * -Statistical modelling for Business Analytics

(*ongoing)

- Performed multivariate regression analysis to predict red wine quality using 1599 data observations.
- Checked for correlation, multicollinearity and verified OLS assumptions.
- Identified heteroskedasticity using Breusch-Pagan test and corrected the consequences of it by using robust standard errors in regression.
- Adjusted R2 without robust error and with robust error was 0.3567 & 0.381 respectively.
- Statistically inferred significant variables were alcohol, volatile acidity, density, chlorides and pH..

Quora Question Pair Similarity – NLP Text Mining (Applied Machine Learning)

(Mar'21 – May21)

- Developed a binary classification model to identify questions asked on Quora that are duplicates of the questions that have already been asked.
- Performed EDA to get basic understanding of dataset, pre-processed text features by cleaning, stemming, stop word removal etc. followed by advanced feature extraction using Fuzzy features.
- Featurised text data using tf-idf weighted word-vectors and created a baseline model to get the worst case log-loss performance.
- Applied Logistic Regression, Support vector Machine (SVM) and XGBoost with hyper parameter tuning and evaluated the models on precision and log-loss.

Position of Responsibilities-**PG Core Team Member, Counselling Services, IIT Kanpur**

- Organized two day long institute level Orientation program for 1500+ students for this Academic Year.
- Currently handling the Facebook helpdesk of Y21 PG Students.
- Responsible for handling the PG section of counselling service website.

Certifications and Achievements:

- Machine Learning:** Hands-On Python & R in Data Science.
- SQL for Data Science-** UDEMY
- Secured **99.63** percentile in **GATE 2020 (ME)**
- Gold Medalist in B. Tech. (Mechanical Engineering).