# Dr. Atul Kumar







## **SUMMARY**

Passionate Data Scientist with expertise in advanced analytical methodologies, Machine Learning, Deep Learning, NLP, statistical analysis, LLM, BERT and generative AI. Eagerly seeking a dynamic role to manage and spearhead large-scale projects in data science, machine learning, and AI. I bring to the table a robust analytical mindset, technical proficiency, and a solid educational foundation. With hands-on experience in model development, deployment, and optimization, I am dedicated to addressing intricate challenges through a data-centric approach. Ready for relocation opportunities.

# **SKILL**

Programming	Python (Pandas, NumPy, Matplotlib, Seaborn Keras, , Scikit-learn, NLTK, Spacy. TensorFlow) SQL, JAVA, C++	
Machine Learning	Linear and Logistic Regression, Decision Trees, Random Forest, XGboost, SVM	
	K means, LDA, PCA, CNN, RCNN, LSTM, NLP, Q Learning and Deep Q learning,	
	BERT, LLM, Gen Al	
Tools	Power BI, Power point, MS Excel	
DS Applications	Statistical modelling, Machine learning, Predictive Modelling, Time series Forecasting	
•	Working experience with cloud computing platforms AWS, Azure, or GCP.	
•	Working experience with <b>GEN AI, BERT, RAG</b> & Model Tuning.	
•	Working experience on concepts like Automated ML and Data Pipeline.	
<b>&gt;</b>	Working experience with Docker and kubernetes.	
<b>&gt;</b>	Working experience with AWS Sagemaker.	
•	Working experience <b>Linux</b> .	
•	Continuously learn about new AI technologies and trends.	

#### **EXPERIENCE**

Intellipaat	Data Scientist Interm (Remote)	August 23 to till date
Project Details	1. Text Classification using <b>BERT Model.</b> 2 Fake news detection <b>Using AI models</b>	

- Red wine Quality Analysis Based on their chemical Properties: EDA, Statsmodel, Linear Regression and Model Evaluation done.
- 4. Hear Rate Failure Prediction: EDA, ANN Model build using keras etc
- 5. Women's Online Cloths Purchase review Done : NLP , LSTM And RNN model build using TensorFlow keras, etc
- 6. Sentiment Analysis: Sentiment analysis has widespread applications in various fields, including marketing, customer service, social media monitoring, market research, and product development. It helps businesses and organizations better understand and respond to customer sentiment, improve products and services, and enhance overall customer satisfaction- LLM, RNN ,BERT model prepared.
- 7. Time Series Analysis This project is the prediction analysis of passenger in flight year wise.
- 8. Prediction of Future sales This Projet uses LSTM model, Keras and other libraries of Python to predict the future sale

**Code s**oft Data Scientist Interm (Remote) 04<sup>th</sup> Dec23 To 4<sup>th</sup> January24 Project: **Iris Flower classification** It comprises information about three different species of Iris flowers: Iris setosa, Iris versicolor, and Iris virginica. Based on their features, the goal is often to classify each flower into one of the three species. – EDA, Pandas, matplotlib, seaborn are used to build Neural network model.

**Psyl**iq Data Scientist Intern (Remote) 01<sup>st</sup> Dec23 to 31<sup>st</sup> Dec23 Project: **TITANIC SURVIVAL PREDICTION**: Prediction done on the basis of ticket of the different class-Data Visualization, Feature Engineering, Logistic regression, Random Forest, Gradient Boosting ant AdaBoost are used to build ml model.

**BBMK Univer**sity Assistant Professor (RSP college) 02<sup>nd</sup> Feb 2018 to till date Subject Taught: Mathematical Physics, Basic Electronics, Python and Digital Communication

**PSIT Jai**pur Assistant Professor 03<sup>rd</sup> Oct2013 to 30<sup>th</sup> Nov 2017

Subject Taught: Mathematical Physics, optics And Basic Electronics.

## **EDUCATION**

# **Executive Post Graduation Certification in Data Science** and Artificial Intelligence

IIT- Roorkee Nov 24

Coursework: Statistical foundations, Machine learning, Deep learning, Advance ML, Predictive analytics, Neural Network, AI, Gen AI, LLM, BERT, Power BI, Computer Vision, GIT, Azure etc

Ph.D. Applied Physics	IIT-ISM Dhanbad	2013
M.Sc. (Physics with Spl. Electronics)	VBU Hazaribagh	2006
Master of Computer Application (MCA)	IGNOU	2011

B.Sc. (Hon's) Physics

VBU Hazaribagh

2003

PROJECTS (Description and code on Github) : <a href="https://github.com/atuldnb">https://github.com/atuldnb</a>



Over ten projects have been completed, each covering diverse topics within the realm of machine learning, deep learning, artificial intelligence (AI), and Generative artificial intelligence. Detailed descriptions and corresponding code for these projects can be found on GitHub.

### LICENSES & CERTIFICATIONS



Description & Certificates on www.linkedin.com/in/atuldnb . To date, a total of 20 licenses and certificates have been obtained.

### LIST OF PUBLICATION

- 1. Kumar A, Kumar D. Singh U. K and Gupta P. S (2010), "Development of an Automated System for Continuous Monitoring of Powered Roof Support in Longwall Panel", Journal of Coal Science & Engg. (China), ISSN 1006-9097, Vol.16 No.4, Pp 337-340.
- 2. Kumar A, Kumar D, Singh U. K, Gupta P. S and Gauri Shankar(2011), "Optimizing Fibre Optics for Coal Mine Automation", In. Jl. Control and Automation, 2005-4297, Science & Engineering Research Support Society, Republic of Korea: ISSN: 2005-4297 Vol4, No 3:Pp. 19-30
- 3. Singh U. K, Kumar A, and Kumar N. (2009), "Development of Battery Operated Intrinsically Safe Data Logging System for Power Support in Longwall Mining", International Seminar and Exhibition for Explosive Atmospheres on Recent Trends in Design, Development, Testing & Certification of Ex-Equipment (DTEX 2009), 29-31 October, 2009, CIMFR, Dhanbad (India), Pp. 214-219.
- Singh U. K, Kumar A and Ahirwal B. (2008), "An Intrinsically Safe Data Logger for Continuous Monitoring of Powered Roof Support in Longwall Panel", in Proc. Frontiers in Electronics, Communication, Instrumentation and Information Technology (FECIIT-08), Organized by Deptt. Of Electronics and Instrumentation, Indian School of Mines, Dhanbad, Pp. 366-371.
- 5. Shiv Shankar Prasad Shukla, Sandeep Pratap, Singh Kinjal, Shah and Atul kumar, "Enhancing Security & Integrity of Data Using Watermarking & Digital Signature" 1st Int'l Conf. on Recent Advances in Information Technology | RAIT-2012 in March 15-17 2012 at Department of Computer science and Engineering, ISM Dhanbad (India) ISBN: 978-1-4577-0694-3 IEEE pp 28-31