**Abhijay Tyagi**

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# PROFILE SUMMARY

Results-driven Analyst with expertise in Excel, Tableau for data visualization, and SQL for efficient database querying. Proven success in optimizing operations, delivering data-driven insights, and influencing strategic business decisions. Seeking a position in an organization that offers professional growth while requiring strong analytical and technical skills to utilize my skills and abilities and to start up my career.

# EDUCATION

* Master of Science - Data Science, **University of Colorado at Boulder, Boulder, Colorado, USA** (GPA: 3.8/4) Aug 2023-Present
* Bachelor of Technology -Computer Science, **Amity University, Noida, INDIA (**CGPA-8.32/10) Aug 2019 – Jun 2023

# SKILLS

* **Programming** - SQL (MySQL, PostgreSQL,), Python, R, R-Markdown, HTML, CSS
* **Data Science/Analytics** - Power BI, Tableau, Excel, Matplotlib, Seaborn, NumPy, Pandas, Scikit-learn, Tidyverse, Git, Qualtrics, Google Analytics, API.
* **Machine Learning/Deep Learning**- Pytorch, Tensorflow, Keras, OpenCV, Time-Series Forecasting(ARIMA, PROPHET).

**CERTIFICATIONS**

* [Expressway to Data Science: R Programming and Tidyverse Specialization (Coursera), Issued Aug 2023, Credential ID ND5PTCFFM8VF](https://www.coursera.org/account/accomplishments/specialization/certificate/ND5PTCFFM8VF)
* [Introduction to Programming Using Python (Udemy) , Issued Apr 2022](https://www.udemy.com/certificate/UC-684d0644-bddc-4b02-9389-fe1252e87171/) .

# RESEARCH PUBLICATIONS

* **“Indian Sign Language Recognition Using Distributed Machine Learning”**

▪ [Published In- International Journal of All Research Education and Scientific Methods (IJARESM) ISSN: 2455- 6211, Vol. 10, Issue 11, November-2022](https://www.ijaresm.com/indian-sign-language-recognition-using-distributed-machine-learning)

* **“Virtual Mouse using OpenCV”**

[▪ Published In- International Journal of All Research Education and Scientific Methods (IJARESM) ISSN: 24556211, Vol. 11, Issue 6, June-2022](https://www.ijaresm.com/virtual-mouse-using-open-cv)

# RELEVANT WORK EXPERIENCE

* **Data and Analytics Intern** **Country Edu Private Limited, Gurugram, INDIA**

- Supervised data pre-processing operations, transforming raw data into a refined, efficient format for advanced analytics.

- Conducted extensive exploratory data analysis on several datasets to identify useful insights and trends.

- Used several machine learning methods for modeling and analysis, demonstrating a diverse skill set in data science.

-Enhanced skills in data management, statistical analysis, and machine learning applications.

- Helped to optimize data utilization methods by stressing adaptability and problem-solving in data analytics.

# PROJECTS

* **Forecasting Financial Data in Real-Time -** [**GitHub**](https://github.com/Abhijaytyagi/Forecasting-Financial-Data-In-Real-Time)

-Drove real-time financial data forecasting utilizing advanced models like Holt-Winters and ARIMA, methodically examining a massive dataset containing financial, exogenous, and economic aspects. The results demonstrated the models' effectiveness, offering actionable information for businesses to proactively manage uncertainty and make educated strategic decisions. Demonstrated expertise in data-driven financial analysis, forecasting, and risk management.

* **Predicting Crime rate Pattern in Maryland State-** [**GitHub**](https://github.com/Abhijaytyagi/Predicting-Crime-rate-in-Maryland-State)

- Conducted comprehensive analysis of crime rate patterns in Maryland from 1975 to 2016, leveraging advanced machine learning models including KNN, SVM, Naive Bayes, decision trees, neural networks, and regression models.Utilized datasets from the Maryland Statistical Analysis Center to explore spatial and temporal dimensions of crime, aiming to transcend conventional statistical analysis and provide insights for targeted policymaking.Applied predictive modeling and pattern recognition techniques to discern linear trends in violent crime, providing historical insights and potential future trajectories to inform data-driven policymaking for Maryland's socio-economic landscape.

* **Exploratory Analysis using Geolocational Data-** [**GitHub**](https://github.com/Abhijaytyagi/Exploratory-Analysis-using-Geolocational-Data)

**-** Developed exploratory study of geolocational data, using a variety of methodologies to assess efficiency. To extract profound insights, the K-means clustering technique was used to categorize data, followed by exploration and visualization of the dataset. Geospatial analysis expertise is demonstrated through the usage of Python, Scikit-learn, and Folium packages, showcasing a diverse skill set for smart data exploration and accurate modeling.