## COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK

## **PRE-COLLEGE PROGRAMS**

Student:	Dev Patel
Course:	Big Data, Machine Learning and Real-World applications
Date:	08/01/2022

The Big Data, Machine Learning and Real-World applications course enabled participants to navigate the new reality of the "data economy," in which data is the "the new oil" and application of AI transcends across industries. The focus was on the strategic use of AI and BigData to derive actionable business outcomes, be it for revenue generation or improving customer experience. Participants developed a strong foundation in data-driven thinking for solving real-world problems.

They were also introduced to a variety of popular technologies for data analytics and gained familiarity with programming in Python and open source based Data Science platforms. Students learned data visualization, data manipulation and transformation, machine learning frameworks and developed ML/NLP models in the class. They also gained exposure to advanced topics like NLP, Automated Machine Learning, RPA, XG Boost and Explainable AI among others.

Of the 22 bright and motivated students who successfully completed this course, Dev Patel performed most successfully. He did his work thoroughly and contributed significantly to the class with active participation. The students were required to analyze real world data sets and build Machine Learning models to predict, in a real world business scenario.

Dev led his group with an outstanding Machine Learning model and impressed the entire class with an excellent presentation. In other words, he understood the AI/ML/Big Data concepts very well and displayed the leadership and people management skills to help his group to create and present the best predictive model among all the groups in the class.

On the final group project, which included the creation of a Machine Learning algorithm using a real world business dataset, Dev again performed extremely well and played a pivotal role for his team. His business use case understanding, exploratory data analysis, model building and model evaluation using a real world dataset were excellent.

With active involvement from Dev, his group did a thorough work in the final project and impressed me again with an insightful predictive model and presentation, which was well received by the entire class. This demonstrates to me how motivated and intelligent this young man is for an AI/Data Science related field for further studies.

He *did* actively participate in the class and in the group, which will help him build a good network of very intelligent and highly motivated students from all over the world.

I am confident that Dev would excel at a top-caliber college like Columbia or any other Ivy league university and be very successful in a FinTech or AI/Machine Learning related career in the future.

Sincerely,

Rajeev Nair Big Data, Machine Learning and Real-World applications

## SCHOOL OF PROFESSIONAL STUDIES