## Verified Certificate



This is to certify that

Joseph Santarcangelo

Data Scientist

IBM

## Harika Thummapala

successfully completed and received a passing grade in

ML0101EN: Machine Learning with Python: A Practical Introduction

a course of study offered by IBM, an online learning initiative of IBM.



Verified Certificate Issued May 31, 2024 Valid Certificate ID 4a808bce3d8849a48963d80a727d073f