

Coursera IBM Data Science Capstone Project : Opening a new Indian Restaurant in Toronto



**Report Prepared by :
Abhinav Chandan
(www.github.com/abhinavchandan)**

TABLE OF CONTENTS

1. INTRODUCTION

a. Business Problem

2. DATA REQUIREMENT

3. DATA COLLECTION

Introduction :

For the Capstone project, I am creating a hypothetical scenario for a concept Indian restaurateur who wants to explore opening an authentic purely vegetarian Indian restaurant in Toronto area. The idea behind this project is that there may not be enough vegetarian Indian restaurants in Toronto and it might present a great opportunity for this entrepreneur who is based in Canada. A high number of Indians are vegetarians and prefer not to eat in restaurants where non-vegetarian food is served. With the purpose in mind, finding the location to open such a restaurant is one of the most important decisions for this entrepreneur and I am designing this project to help him find the most suitable location.

Business Problem :

The objective of this capstone project is to find the most suitable location for the entrepreneur to open a new Indian restaurant in Toronto, Canada. By using data science methods and machine learning methods such as clustering, this project aims to provide solutions to answer the business question: In Toronto, if an entrepreneur wants to open a vegetarian Indian restaurant, where should they consider opening it?

Data Requirement :

To solve this problem, I will need below data:

- List of neighborhoods in Toronto, Canada.
- Latitude and Longitude of these neighborhoods.
- Venue data related to Indian restaurants. This will help us find the neighborhoods

that are most suitable to open a vegetarian Indian restaurant.

Data Collection:

- Scrapping of Toronto neighborhoods via Wikipedia
- Getting Latitude and Longitude data of these neighborhoods via Geocoder package
- Using Foursquare API to get venue data related to these neighbourhoods.

