# Waiter tips prediction

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## **ABSTRACT**

## Informal description (ill posed problem)

In this project we will predict tips given to a waiter for his/her service.

### Formal description(Make it well posed problem)

- *Task* (*T*): Analysing and predicting the tips for a waiter.
- *Experience* (E): A collection of various data sets that include some attribute related to the waiter, services, total bill, smoker, time etc.
- *Performance* (P): The number of successful predictions made out of the total number of requests received from the client.

## **Assumptions:**

• Not everyone gets the tip, so we must ensure that who gets the tips for their service.

# 1. INTRODUCTION

#### **Motivation:**

Giving a waiter or waitress a tip does a lot for them. You are signalling to them that you appreciate them and want to give something back. Their hard work makes your experience at the restaurant more enjoyable, So, this machine learning model will help in predicting the tip for the waiter.

#### **Benefits of solution:**

The benefits are both professional and personal. The personal benefit of this model is that a waiter can predict the amount of tip he gets from his customers for his service. Professionally, it benefits the manager of restaurant to know who the best waiter and the waiter is can get a hike in salary.

#### **Solution Use**

This model predicts the tips for the waiters. So, if we give a proper prediction of tips for waiter and improve their services.

## 2. Dataset finalization

#### Data sets:

https://www.kaggle.com/datasets/aminizahra/tips-dataset

https://www.kaggle.com/datasets/rupakroy/waiter-tips-dataset-for-prediction

https://raw.githubusercontent.com/amankharwal/Website-data/master/tips.csv

The above-mentioned data sets predict about the waiters tips according to their services. This can be predicted by total bill, tip, smoker, time, price per person and may contain information about customers.