

# Detecting boroughs in the county of Gustavo A. Madero with a low density of pharmacies

Exploration and prediction

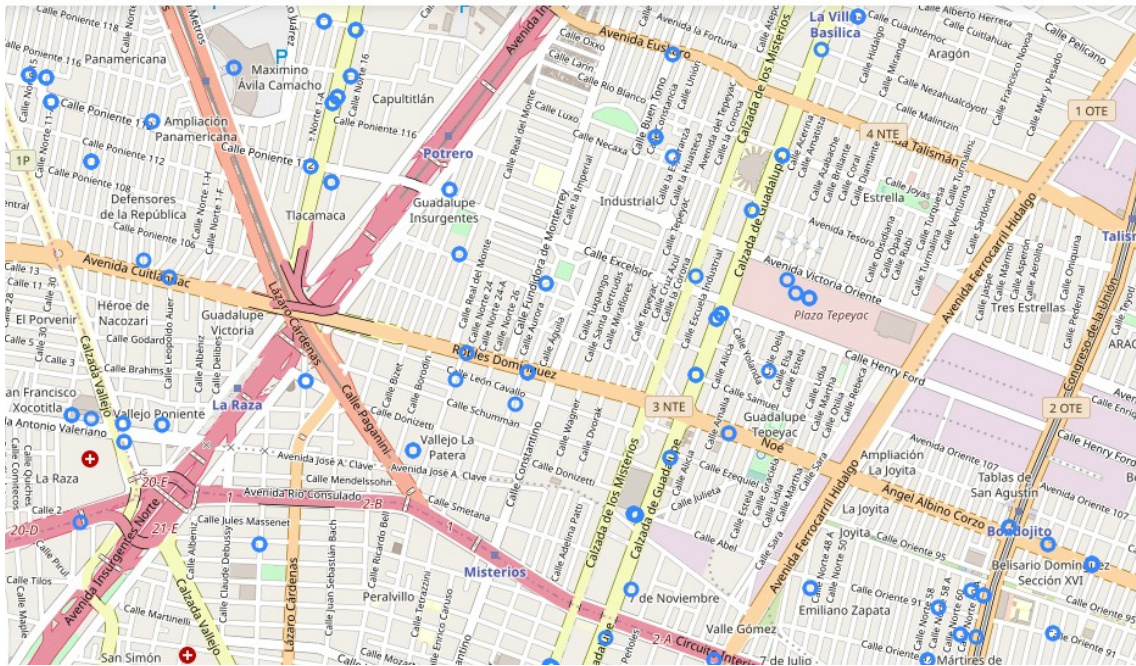
# Stackholders

- Detecting boroughs with a low pharmacy density is valuable for future pharmacy owners
- A good location ensures a constant stream of clients and adequate supply routes

# Data acquisition

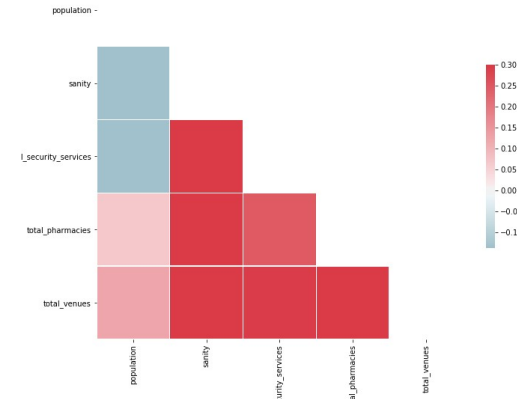
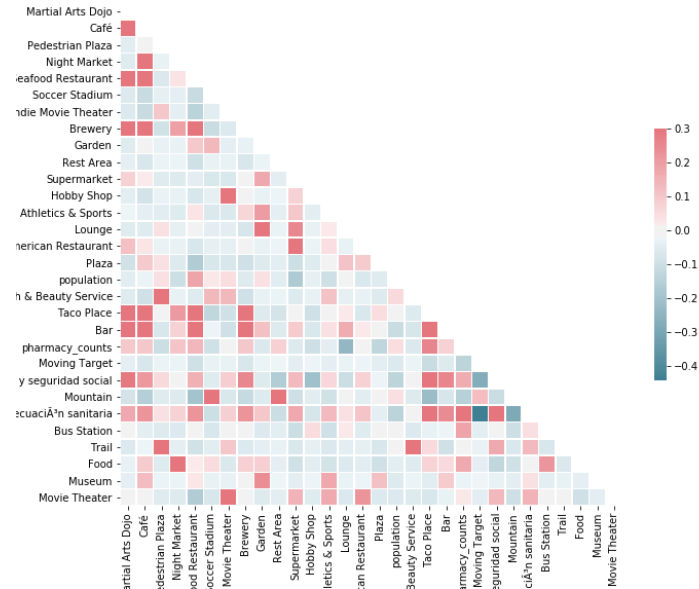
- Socioeconomic data from Mexico City government open data repositories
- Venues data from Fourthsquare api

# Preferred pharmacy locations

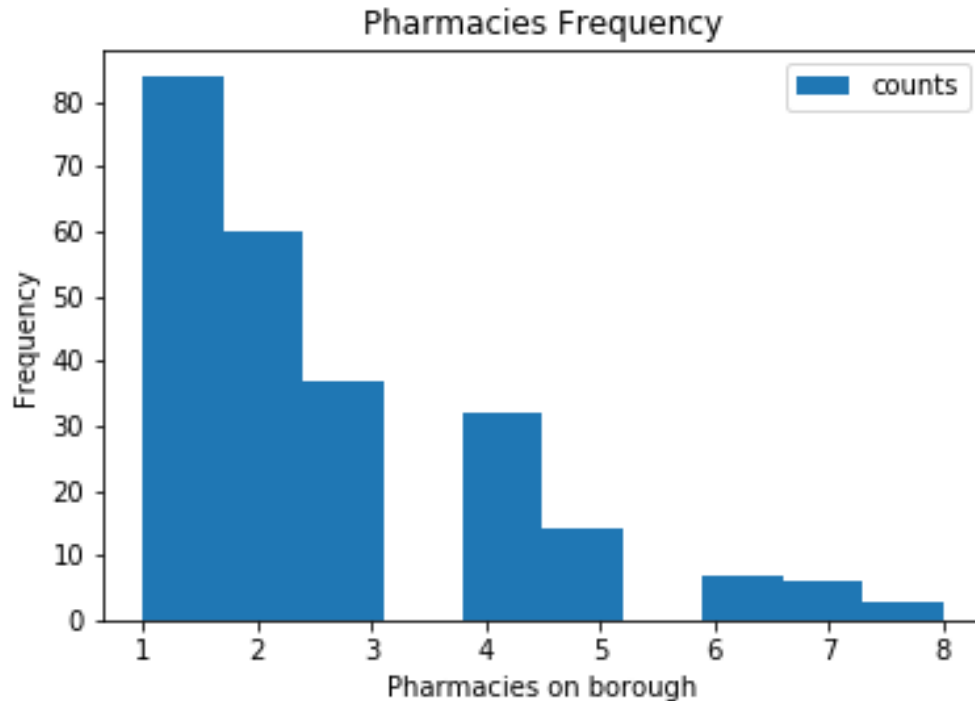


- Preferred pharmacy locations are along medium sized avenues or small streets near a medium size avenue

# Selected variables for model



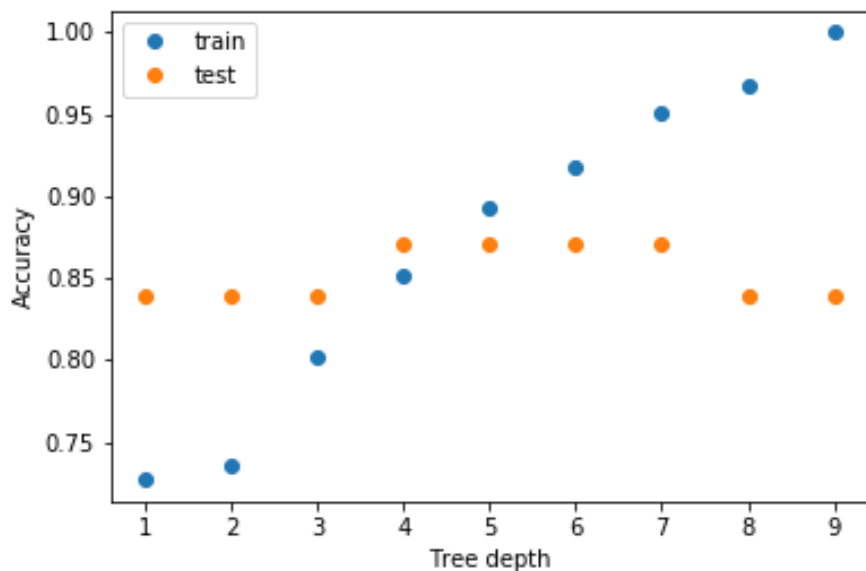
# Target variable



Total boroughs were divided between those having one pharmacy and those having more than one pharmacy thus creating a target variable with two classes.

- One pharmacy: 0
- More than one pharmacies: 1

# Random forest classifier training



Actual 0	26	12
Actual 1	0	114
	Predicted 0	Predicted 1

# Low pharmacy density boroughs

There are some points which belong the class 0 but where classified on the class 1 which means this boroughs can host more than one pharmacies. Thus it is recommended to select a location within this boroughs and along a medium sized avenue or near one. The name of the boroughs are:

Ampliación progreso nacional  
Benito Juárez  
Guadalupe Insurgentes  
La joyita  
San José de la escalera  
San Pedro el chico  
Triunfo de la república

Valle de madero  
Zona escolar oriente  
Ex-ejido San Juan de Aragón sector 32  
Pradera  
Pueblo Santiago Atzacocalco