

# **Predicting Covid Intensive Zones in Delhi**

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## **1. Introduction**

### **1.1 Background**

Covid-19 is an infectious disease that has caused a havoc in the modern world by disrupting the daily life of every civilian on earth. The virus which primarily affects the lungs, has infected 4,543,390 people globally and 303,711 people have lost their lives because of it (as of 15th May, 2020). The pandemic has forced world leaders to come up with stringent measures such as nation-wide lockdowns to curb the spread of the virus. But lockdowns are holding back civilians from working and earning a living, and its effect does not trouble the poor but every section of the society, even the governments themselves. In such a situation, where economies fall and countries will be heading to recessions, people might be forced to head out and work and live along with the virus. This causes a huge risk to countries like mine, India, with an enormous population density.

### **1.2 Problem**

To foresee the effects of lifting lockdowns, my research and this notebook will help people understand which neighborhoods might see a surge in Covid-19 cases. I will be using population density data and location data of popular venues, their proximity and their frequency of occurrence (like popular market places) to estimate the interaction occurring at a particular place. I will be focusing on the predictions mainly in my city (Delhi, the capital of India).

### **1.3 Interest**

With this, I hope readers can better understand potentially risky areas and authorities can take measures to place restrictions beforehand to such areas to reduce the spread of the virus and thus the suffering to civilian life.

I hope and pray whoever reads this is safe.