

**L.A Type of Crime (Post Pandemic)**

**Los Angeles crime data is available at**

<https://catalog.data.gov/dataset/crime-data-from-2020-to-present>

**Can we help to prevent further crime in Los Angeles? By predicting future crime in Los Angeles, we can take preemptive measures whenever possible, including but not limited to:**

* Increasing police presence in certain neighborhoods where there is *frequent* crime all-year round
* Increasing police presence in certain neighborhoods where there is recurring crime *during a certain time period* (i.e memorial day weekend, week x during the summer, etc.)
* Though controversial, establishing curfews during certain historical spikes in crime
* Sending out general alerts to citizens during historical spikes in crime (ahead of those spikes)
* Allocating more resources for averting crime (quality education, incentivized anonymous tip centers, etc.) in certain areas with high-crime rates

**Labels:**

* Primary Type of Crime (column in dataset)

**Features:**

* Use one-hot for multi-dimensional categorical vars
* Hour/Time (possibly using one-hot vector)
* Day of Week (python datetime can compute day of week; possibly use one-hot vector)
* Holidays (binary flag)
  + (e.g. <https://gist.github.com/shivaas/4758439>)
* Weather / Season (Daily, possibly hourly)
  + <https://www.ncdc.noaa.gov/cdo-web/datasets>
* Rpt District Number (Given data)
* Income & Population
  + Link Separate Doc (census?)
  + Cross reference with Rpt district number
* Location Type (Given data)
* Victim Age (Given data)
* Victim Sex (Given data)
* Latitude (prob wont be used)
* Longitude (prob wont be used)

Is crime self-exciting? Use a Recurrent Neural Network

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