

APPLIED DATA SCIENCE CAPSTONE PROJECT

THIS PRESENTATION CONTAINS ALL VISUALIZATIONS DERIVED FROM THE
IPYTHON NOTEBOOK THAT WAS UPLOADED ON GITHUB.

This is the dataset that was derived after scraping wikipedia and other manipulations

The screenshot shows a Jupyter Notebook titled "FINAL_PROJECT_CODE" with a last checkpoint 21 hours ago. The interface includes a menu bar (File, Edit, View, Insert, Cell, Kernel, Widgets, Help) and a toolbar with icons for file operations, running, and code execution. The notebook contains several code cells:

- A code cell with a comment: `# color='white', edgecolor='black')`
- An input cell (In [18]) with code: `# plot and show
gdf.plot(ax=ax, color='red')
plt.show()`
- An input cell (In [19]) with code: `scar = jj[jj['Borough'] == 'Scarborough'].reset_index(drop=True)
scar.head()`
- An output cell (Out[19]) displaying a table of data for Scarborough, Ontario.
- An input cell (In [20]) with code: `address = 'Scarborough, Toronto'
geolocator = Nominatim(user_agent="ny_explorer")
location = geolocator.geocode(address)
latitude = location.latitude
longitude = location.longitude
print('The geograpical coordinate of Manhattan are {}, {}'.format(latitude, longitude))`

The output of the last cell shows the geographical coordinates of Manhattan: 43.773077, -79.257774.

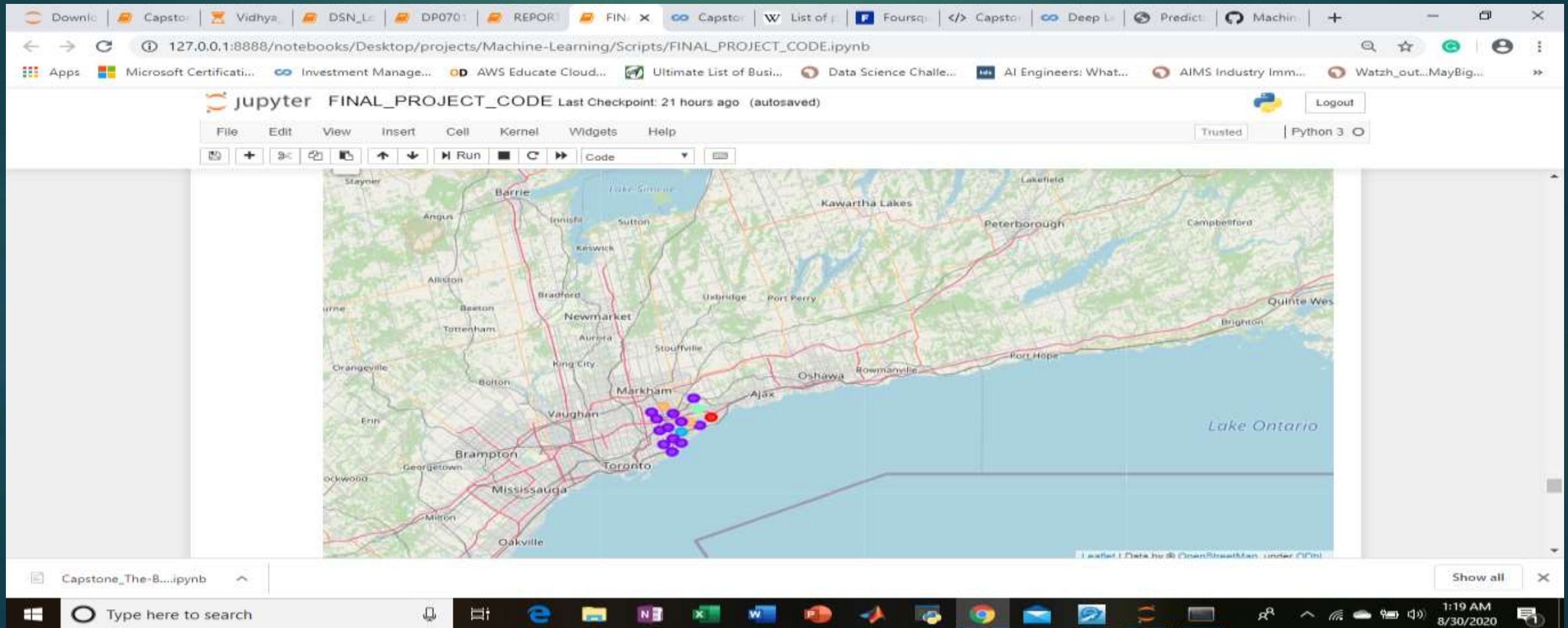
| | Postal Code | Borough | Neighborhood | Latitude | Longitude |
|---|-------------|-------------|--|-----------|------------|
| 0 | M1B | Scarborough | Malvern, Rouge | 43.806686 | -79.194353 |
| 1 | M1C | Scarborough | Rouge Hill, Port Union, Highland Creek | 43.784535 | -79.160497 |
| 2 | M1E | Scarborough | Guildwood, Morningside, West Hill | 43.763573 | -79.188711 |
| 3 | M1G | Scarborough | Woburn | 43.770992 | -79.216917 |
| 4 | M1H | Scarborough | Cedarbrae | 43.773136 | -79.239476 |

The Windows taskbar at the bottom shows the time as 1:18 AM on 8/30/2020.

This is the Scarborough neighborhood

The screenshot displays a web browser window with a Jupyter Notebook interface. The browser's address bar shows the URL `127.0.0.1:8888/notebooks/Desktop/projects/Machine-Learning/Scripts/FINAL_PROJECT_CODE.ipynb`. The notebook's title bar reads "jupyter FINAL_PROJECT_CODE Last Checkpoint: 21 hours ago (autosaved)". The interface includes a menu bar (File, Edit, View, Insert, Cell, Kernel, Widgets, Help) and a toolbar with icons for file operations, running code, and switching between code and output views. The main content area features a map of the Greater Toronto Area, with a cluster of blue circular markers concentrated in the Scarborough neighborhood, east of Toronto. The map shows major highways like the 401, 404, and 407, and labels for various cities and towns including Markham, Richmond Hill, Vaughan, Brampton, Mississauga, and Toronto. The bottom of the image shows the Windows taskbar with the search bar and several application icons, and the system clock indicates 1:18 AM on 8/30/2020.

This is the result of our cluster.



As we can clearly see in cluster 2, these are the places of interest.

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127.0.0.1:8888/notebooks/Desktop/projects/Machine-Learning/Scripts/FINAL_PROJECT_CODE.ipynb

Apps Microsoft Certificati... Investment Manage... AWS Educate Cloud... Ultimate List of Busi... Data Science Challe... AI Engineers: What... AIMS Industry Imm... Watch_out...MayBig...

jupyter FINAL_PROJECT_CODE Last Checkpoint: 21 hours ago (autosaved) Logout

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3.0

In [46]: `scar_merged.loc[scar_merged['Cluster Labels'] == 1, scar_merged.columns[[1] + list(range(5, scar_merged.shape[1]))]]`

Out[46]:

| | Borough | Cluster Labels | 1st Most Common Venue | 2nd Most Common Venue | 3rd Most Common Venue | 4th Most Common Venue | 5th Most Common Venue | 6th Most Common Venue | 7th Most Common Venue | 8th Most Common Venue | 9th Most Common Venue | 10th Most Common Venue |
|----|-------------|----------------|---------------------------|-----------------------|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|
| 2 | Scarborough | 1.0 | Mexican Restaurant | Electronics Store | Medical Center | Restaurant | Rental Car Location | Bank | Breakfast Spot | Intersection | College Stadium | Department Store |
| 4 | Scarborough | 1.0 | Thai Restaurant | Athletics & Sports | Bakery | Bank | Gas Station | Fried Chicken Joint | Caribbean Restaurant | Hakka Restaurant | Department Store | Gym Pool |
| 6 | Scarborough | 1.0 | Hobby Shop | Coffee Shop | Discount Store | Department Store | Chinese Restaurant | Bank | Auto Garage | Gym | Grocery Store | General Entertainment |
| 7 | Scarborough | 1.0 | Bakery | Bus Line | Soccer Field | Ice Cream Shop | Intersection | Bus Station | Metro Station | Vietnamese Restaurant | College Stadium | General Entertainment |
| 8 | Scarborough | 1.0 | American Restaurant | Motel | Gym | Grocery Store | General Entertainment | Gas Station | Fried Chicken Joint | Fast Food Restaurant | Electronics Store | Discount Store |
| 9 | Scarborough | 1.0 | Skating Rink | General Entertainment | Café | College Stadium | Vietnamese Restaurant | Coffee Shop | Gym | Grocery Store | Gas Station | Fried Chicken Joint |
| 10 | Scarborough | 1.0 | Indian Restaurant | Vietnamese Restaurant | Chinese Restaurant | Pet Store | Grocery Store | General Entertainment | Gas Station | Fried Chicken Joint | Fast Food Restaurant | Electronics Store |
| 11 | Scarborough | 1.0 | Middle Eastern Restaurant | Vietnamese Restaurant | Auto Garage | Sandwich Place | Bakery | Breakfast Spot | Coffee Shop | Grocery Store | General Entertainment | Gas Station |
| 12 | Scarborough | 1.0 | Skating Rink | Breakfast Spot | Latin American Restaurant | Lounge | Vietnamese Restaurant | Coffee Shop | Grocery Store | General Entertainment | Gas Station | Fried Chicken Joint |
| 13 | Scarborough | 1.0 | Pizza Place | Pharmacy | Fast Food Restaurant | Fried Chicken Joint | Noodle House | Italian Restaurant | Chinese Restaurant | Bank | Gas Station | Thai Restaurant |

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Type here to search

1:19 AM 8/30/2020



Thank You.