

Edge AI & Robotics: Data Science

Lab Exercise II (IoT data handling)

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On-street Parking Bay Sensors dataset contains information from in-ground car parking bay sensors across the city of Melbourne with status indicating if a car is present or not present, the spatial coordinate of the sensor, and the street marker id.

- Get this data using following API:
 source = Socrata("data.melbourne.vic.gov.au", None)
 data = source.get("vh2v-4nfs", limit=2000)
 *Alternatively you can download csv file from this [Link](#).
- Now convert this data into pandas dataframes.
- Convert the 'Status' column type from string to int (Replace the unique values by 0, 1, 2 etc.)
- Visualize the data and perform clustering on it. Make separate clusters of empty and non empty car parking slots.
- Implement K-means clustering.
- Visualize the data on any map (Open street map or google map).

