

CAPSTONE PROJECT

Natalia Assad

- ▶ This presentation aims to present a clustering of florianópolis beaches based on the infrastructure. In this way, an eventual tourist will be able to identify which beach he would like to stay on, be it on a quieter beach, or on a beach that offers more options for activities.



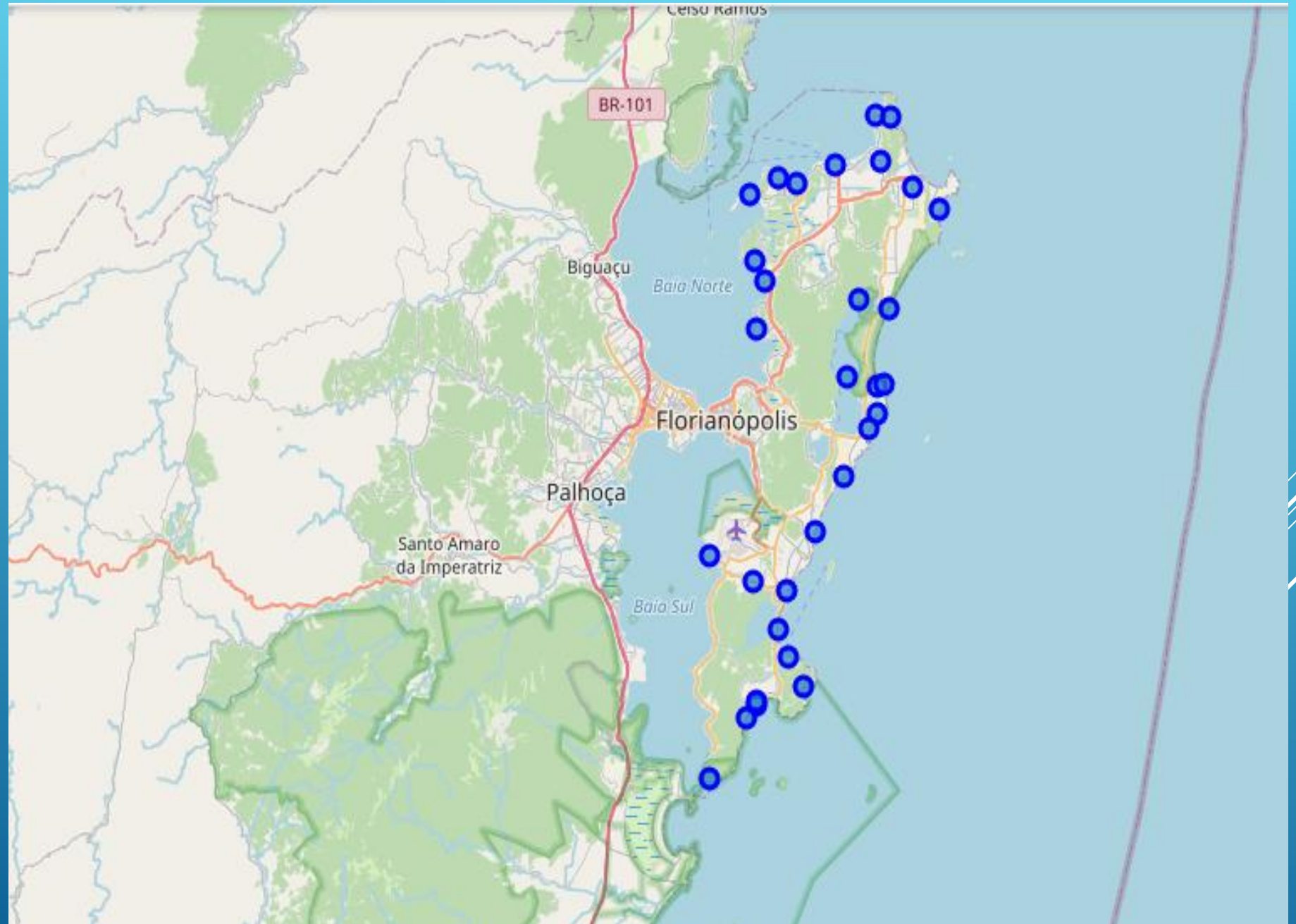
Data

- ▶ Guia Floripa (weeb scraping)
- ▶ API Foursquare
- ▶ Geopy

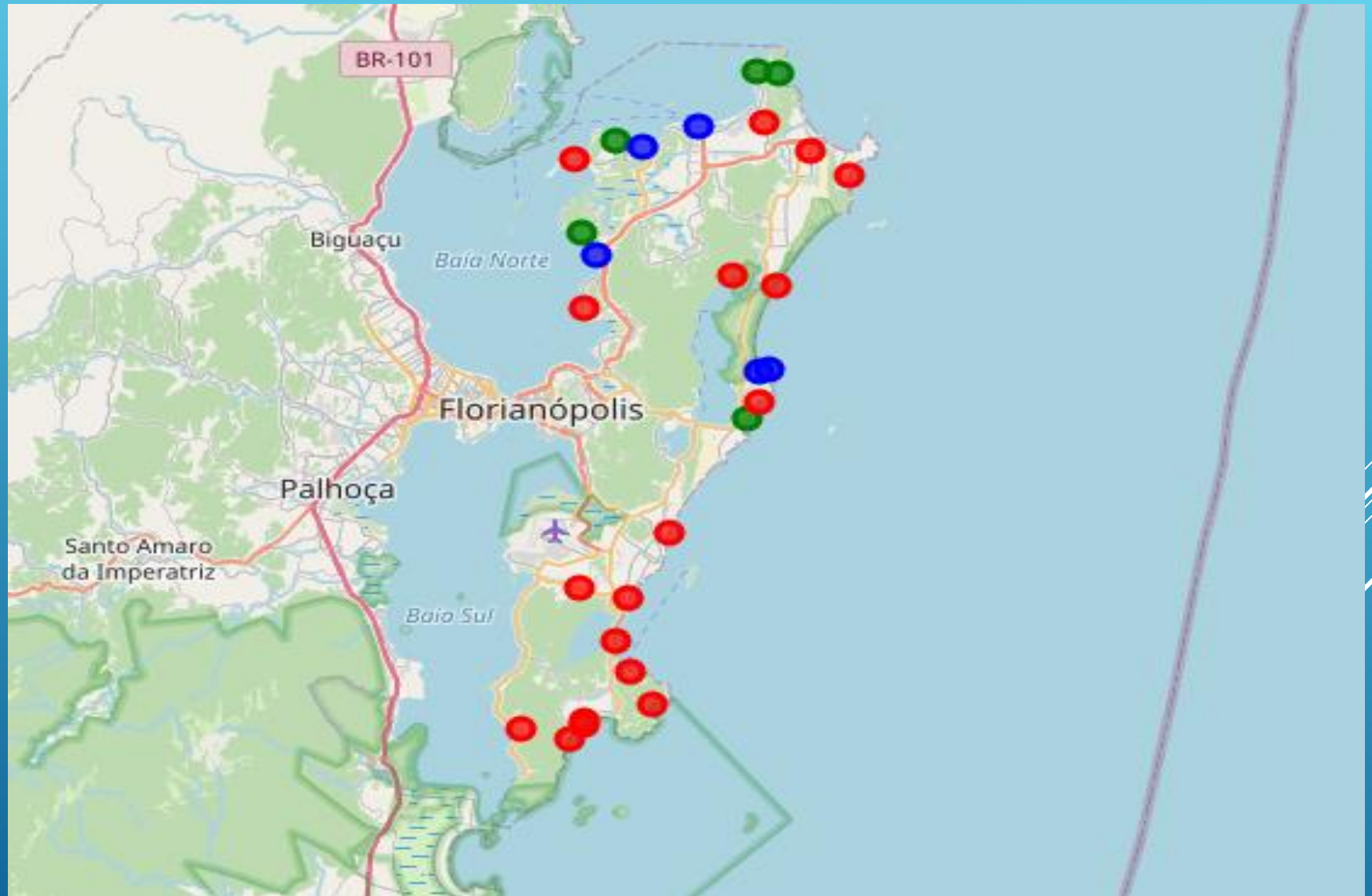


Mapa das Regiões de Florianópolis

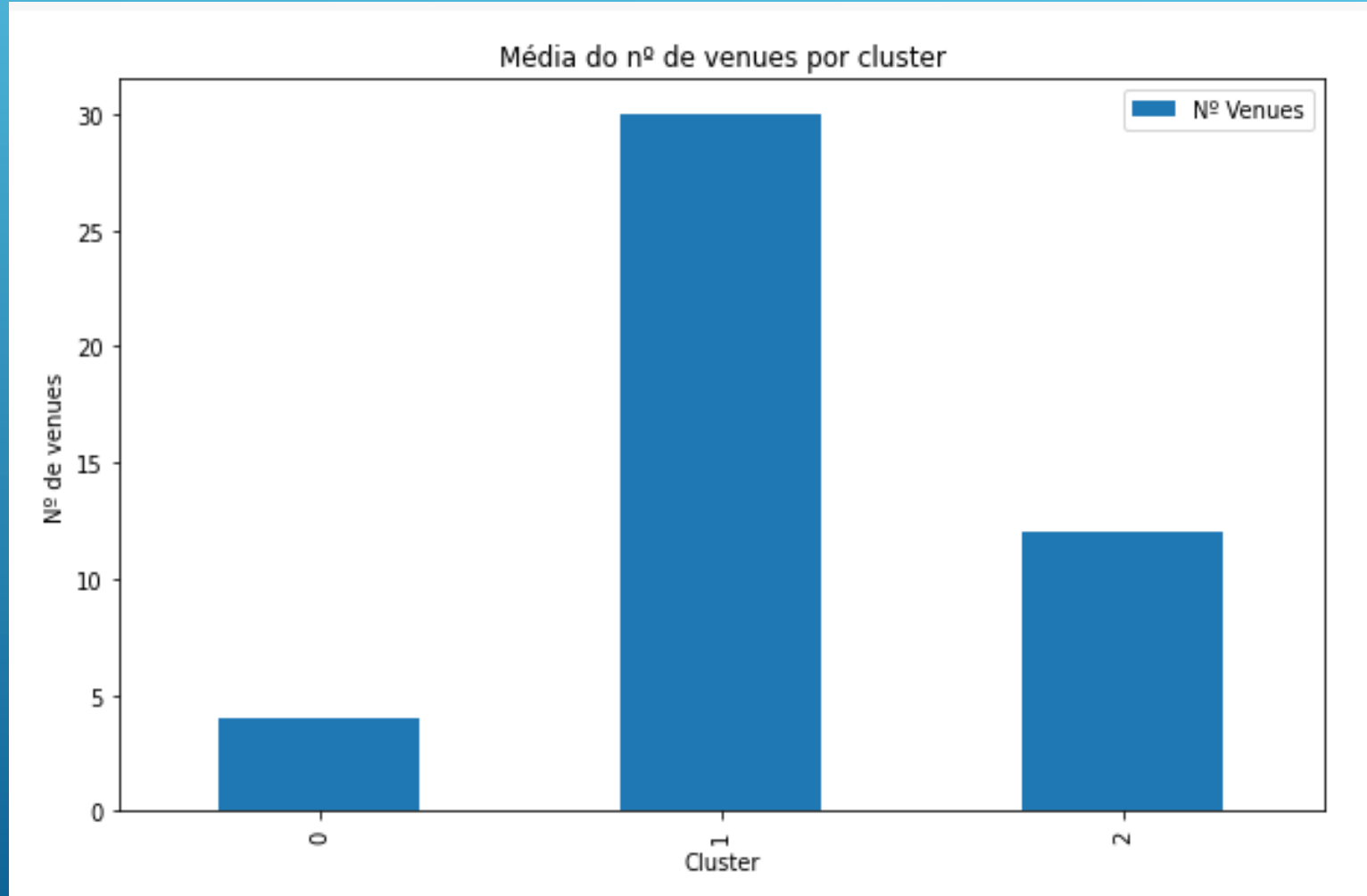
► Folium



► Clustering



► Venues by beach



► Cluster 0

| | Praias | Cluster Label | Venue Category | Latitude | Longitude |
|----|--------------------------------|---------------|----------------|------------|------------|
| 1 | Cachoeira do Bom Jesus, SC | 0 | 5 | -27.426531 | -48.423675 |
| 2 | Cacupé, SC | 0 | 8 | -27.537201 | -48.524557 |
| 4 | Daniela, SC | 0 | 6 | -27.448954 | -48.531250 |
| 5 | Ingleses, SC | 0 | 7 | -27.443666 | -48.397142 |
| 11 | Praia da Armação, SC | 0 | 7 | -27.736035 | -48.507903 |
| 12 | Praia da Galheta, SC | 0 | 2 | -27.593527 | -48.426915 |
| 13 | Praia da Lagoinha do Leste, SC | 0 | 1 | -27.774022 | -48.486880 |
| 14 | Praia da Solidão, SC | 0 | 3 | -27.793965 | -48.533928 |
| 16 | Praia do Campeche, SC | 0 | 4 | -27.671869 | -48.477448 |
| 17 | Praia do Forte, SC | 0 | 4 | -26.168858 | -48.534342 |
| 18 | Praia do Gravatá, SC | 0 | 4 | -26.841915 | -48.631192 |
| 19 | Praia do Matadeiro, SC | 0 | 6 | -27.754367 | -48.498950 |
| 20 | Praia do Morro das Pedras, SC | 0 | 4 | -27.710701 | -48.500155 |
| 21 | Praia do Moçambique, SC | 0 | 2 | -27.524143 | -48.417212 |

► Cluster 1

| | Praias | Cluster Label | Venue Category | Latitude | Longitude |
|-----------|-------------------------------|---------------|----------------|------------|------------|
| 0 | Barra da Lagoa, SC | 1 | 30 | -27.574778 | -48.425835 |
| 3 | Canasvieiras, SC | 1 | 30 | -27.429567 | -48.460244 |
| 7 | Jurerê Tradicional, SC | 1 | 30 | -27.441564 | -48.491754 |
| 26 | Prainha da Barra da Lagoa, SC | 1 | 30 | -27.574137 | -48.421103 |
| 29 | Santo Antônio de Lisboa, SC | 1 | 30 | -27.506151 | -48.518870 |

► Cluster 2

| | Praias | Cluster Label | Venue Category | Latitude | Longitude |
|----|--------------------------|---------------|----------------|------------|------------|
| 6 | Jurerê Internacional, SC | 2 | 12 | -27.438203 | -48.507074 |
| 8 | Ponta das Canas, SC | 2 | 11 | -27.396429 | -48.427428 |
| 9 | Praia Brava, SC | 2 | 13 | -27.397613 | -48.415825 |
| 10 | Praia Mole, SC | 2 | 12 | -27.603133 | -48.433334 |
| 15 | Praia de Naufragados, SC | 2 | 10 | 39.873143 | -8.972437 |
| 28 | Sambaqui, SC | 2 | 17 | -27.492403 | -48.526831 |