

# University California in analysis - The Battle of Neighborhoods

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# Business Problem identification: University California deep analysis for international students

- Each year, many international students [in 2018, it is 28,556] apply their application into University California. There are 9 undergraduate campuses throughout California with 150 disciplines. More academic departments ranked in the top 10 nationally than any other public or private university
- For better decide which campus is most safe and convenient for their future study. Each students and their parents, they need to know:
  - Neighborhood crime-incident data
  - Activities around the campus [Venues of choice]
- This report try to analyze the 9 campus in UC system for undergraduate education, provide intended audience for above information
  - Applicants and their parents/Relatives
  - Every one who Interesting in UC system neighborhood

# Data Source and usage

- <https://www.universityofcalifornia.edu/infocenter> ; and related campus website for basic information
- Folium map rendering for OpenStreetMap data
- FourSquare API for venue related data
- <https://data.sf.gov> for crime-incident related data
- <http://www.city-data.com/> for 10 education location listing
- Python reverse address to geolocation packages for, geolocation determination based on address. <http://www.city-data.com/>

# Data analysis methodology

- Python Anaconda Suite with SciKit-Learn, SciPy and Pandas for
  - Data Cleaning and Selection
  - Applying Machine Learning algorithms and evaluation metrics
  - Statistical Correlations