## Neighbourhood comparison for Uppsala or any other city with Foursquare

## Introduction

In modern times, the regional planning has an increasing importance: globalization, migration flows, connectivity are examples of factors that changes the society continuously and this reflects in how our cities are built.

Foursquare, with its API, is a gold mine of information that can be used as basis to other studies.

This work aims to give a simple tool that suits the data provided by Foursquare to create a unique fingerprint of a certain area, such as a neighbourhood. This fingerprint can be used to compare the area with other ones, which can be anything.

A quick comparison among different zones gives information that can be suited as ground for regional planning, demographics and more.

Uppsala has been taken as an example since it has quite different neighbourhoods; however, the Python notebook can be easily modified to make other kinds of comparisons Examples: two commercial areas in two different cities; a Chinatown against a true Chinese city; low-value residential zones in different cities of the same nation.

## Data

The main data is retrieved from Foursquare by means of its API: basically, the only thing that is needed is the number of venues of a certain type, in a given area.

For the Uppsala case, the swedish Wikipedia article about Uppsala's neighbourhoods is web-scraped: <a href="https://sv.wikipedia.org/wiki/Lista">https://sv.wikipedia.org/wiki/Lista</a> %C3%B6ver stadsdelar i Uppsala

Finally, the coordinates of each zone is retrieved by means of the geopy.geocoders library.