

Project Proposal

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Project Name: Buda + Pest = Budapest

Project Description: The project aims at identifying the older parts of the cities versus the new one, based on the following hypothesis:

Older parts of the city appear to have a more complex structure (i.e. shorter road length, more curves etc.) compared to new ones.

Project Dataset: OpenStreet Map

Project Method:

1. Build a street network of Budapest (and maybe other cities).
 - 1.1 node: Streets junction and end point
 - 1.2 edge: Street between two nodes
 - 1.3 edge weight: Feature based with different kernels (i.e. function of: road length, curvature, direction, dead end etc.)
2. Label some streets as being old or new
3. Using Borel functional calculus identify the old/new parts of the city (Labeling)
4. Compare result with Hypothesis
5. Enjoy