

Finding the Scenic Route

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Problem

Traditional mapping application only use the metric of distance, or estimated time for deciding routes.

-Too much focus on speed & efficiency rather than enjoyment

Solution

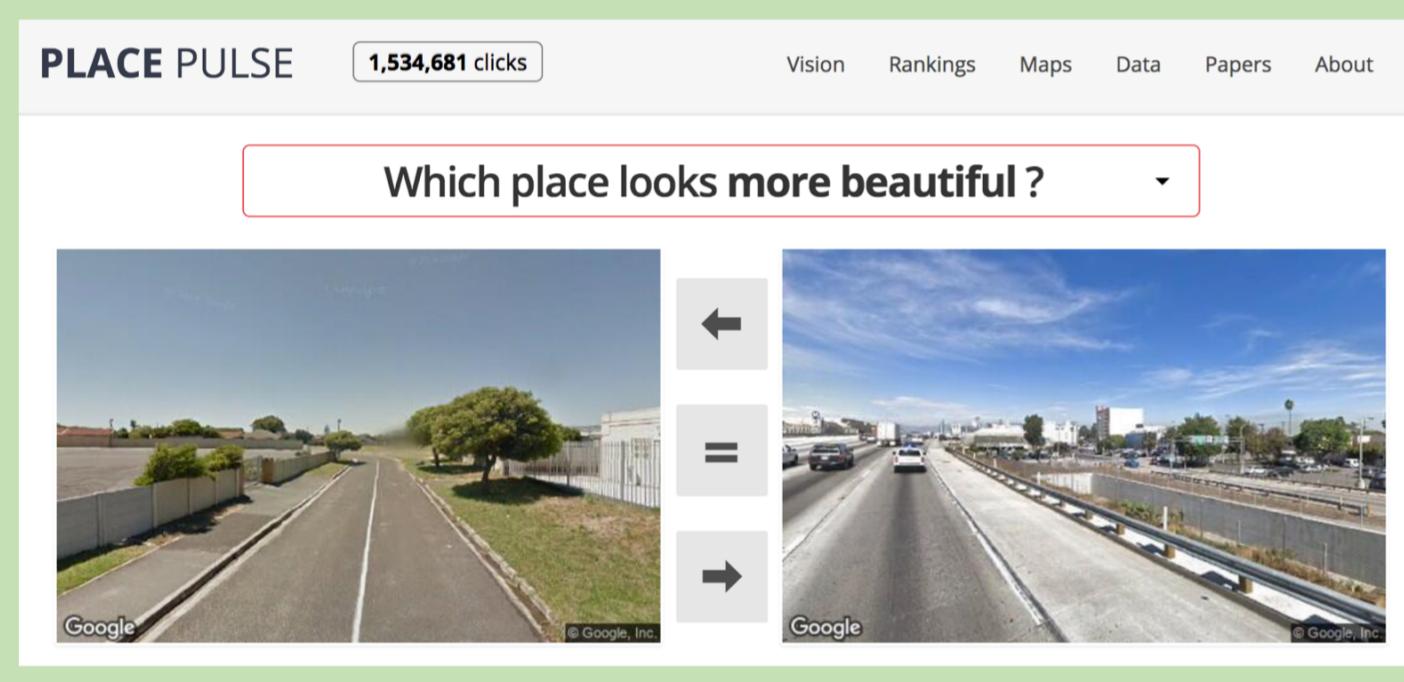
Plan routes taking into account beauty

Generating Numerical Ratings

- Compare each Street View image in Bristol with ~50 other images and record results of these 'competitions'.
- Use Microsoft TrueSkill algorithm to calculate a rating
- Each image receives a beauty score μ and a score σ of how certain the beauty score is

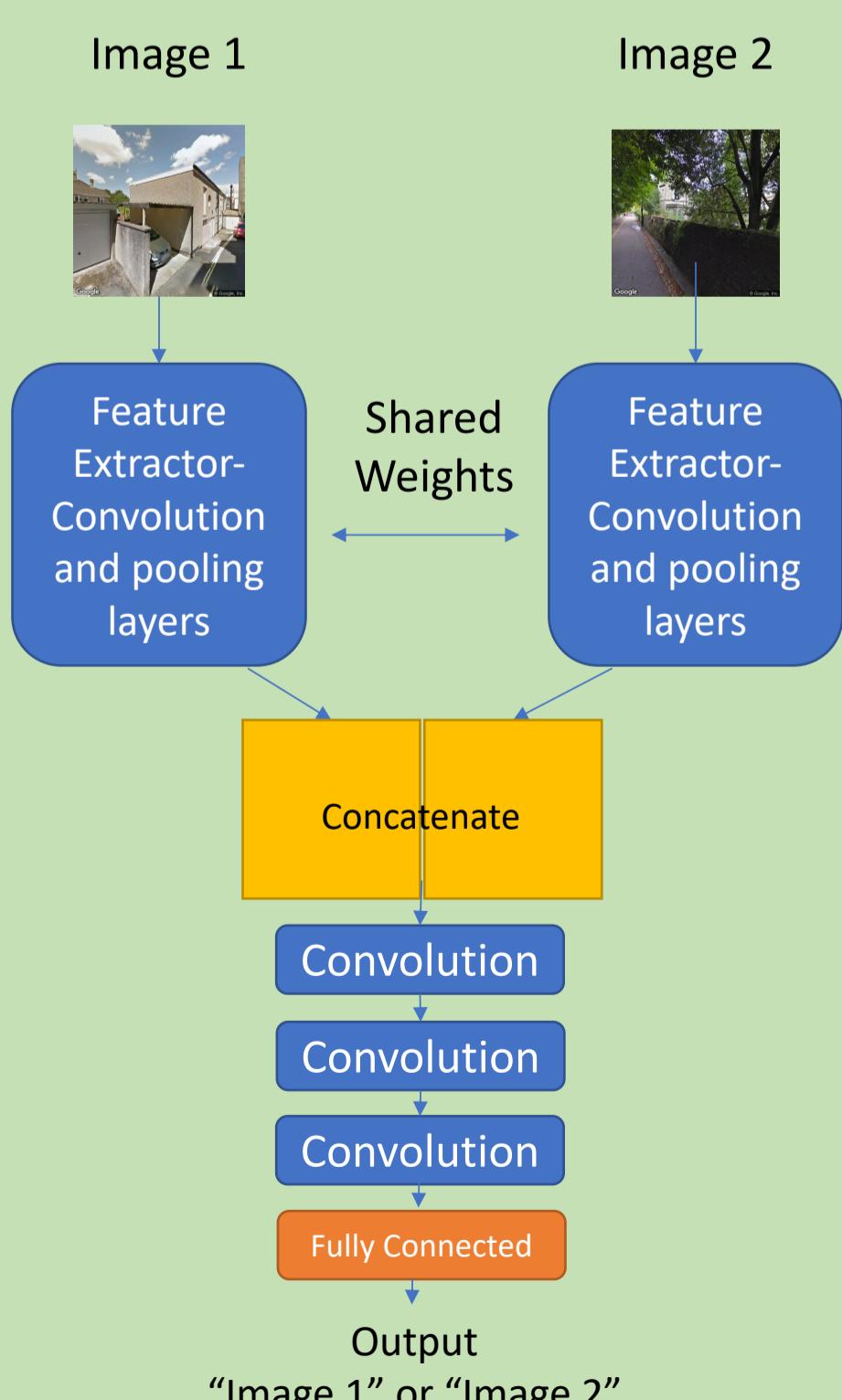
Data

- Over 100,000 street view image comparisons collected by Place Pulse, an MIT project



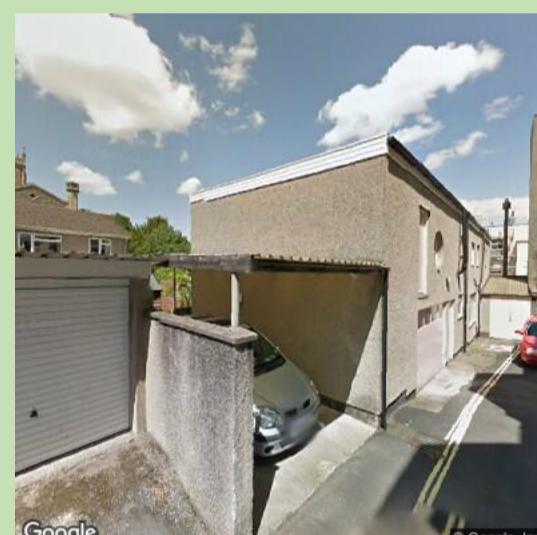
Machine Learning Model

Given 2 images decide which is most beautiful



Preliminary Results

Lowest scoring image



Highest scoring image



Future Work

- Improving model accuracy
- Incorporate beauty scores into route planning
- Make into mobile app
- Incorporating user feedback into route ratings to continuously improve
- Investigation into subjectivity of beauty
- Evaluation of Routes Produced