

Improving Images Geotags

Week 10
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Where am I?

- Purpose of the "Where am I" project is to find GPS tags for a set of query images by comparing them to a dataset of reference images and finding the nearest match.
 - The comparison is by SIFT descriptors.
 - Uses Google Maps Street View as a dataset.

New Dataset

- Collected a dataset of 8126 User Uploaded images to replace the street view dataset.
 - 15% from Panoramio
 - 10% from Flickr
 - 75% from Picasa





08006



08005



08004



08003



08002



08001



08000



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07998



07997



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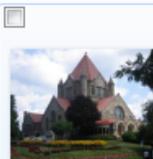
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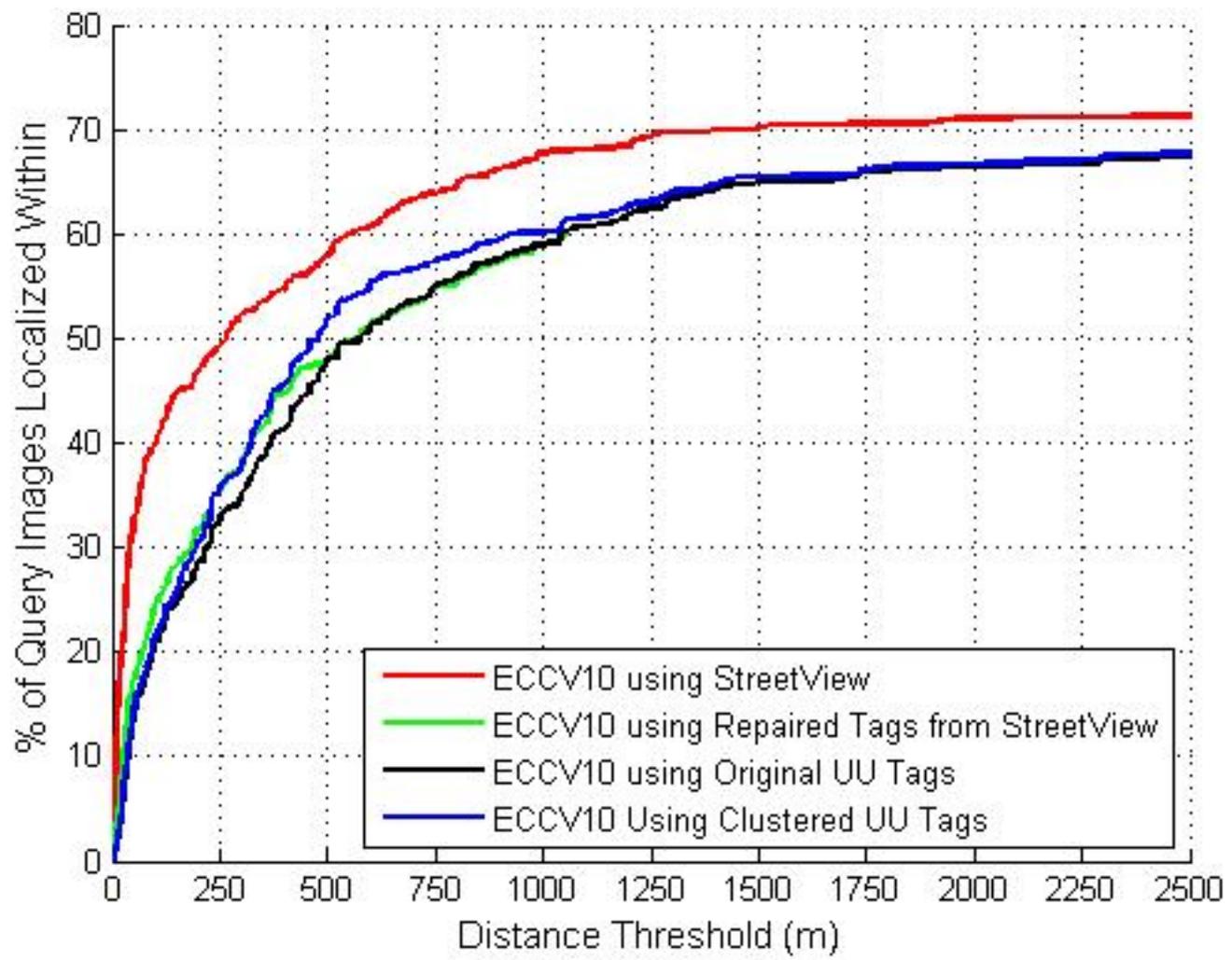
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Purpose

- Our goal is to improve the GPS tags of user uploaded images using a dataset containing other user uploaded images.
- Proposed methods of improving tags:
 - Z-Score outlier removal
 - Chauvenet's outlier removal
 - Clustering of similar images
 - Maximum likelihood estimation
- Others
 - Using relative camera geometry



Current Image = 11



1



2



3



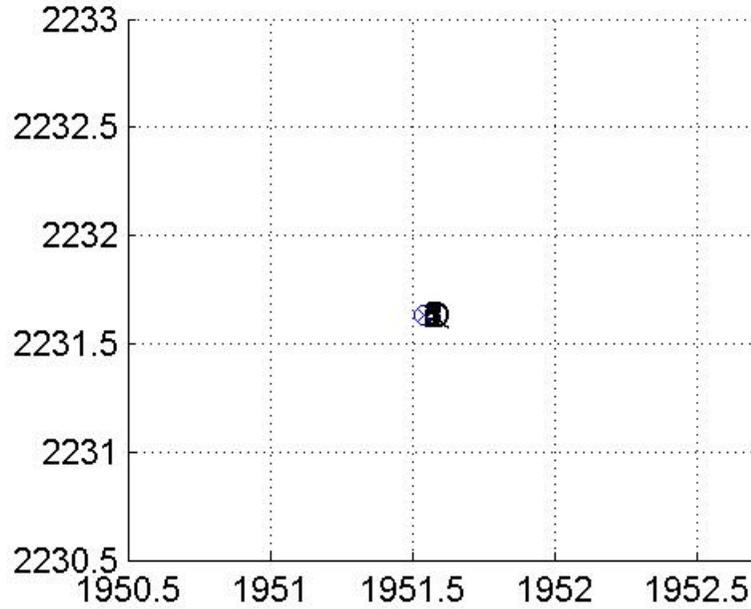
4



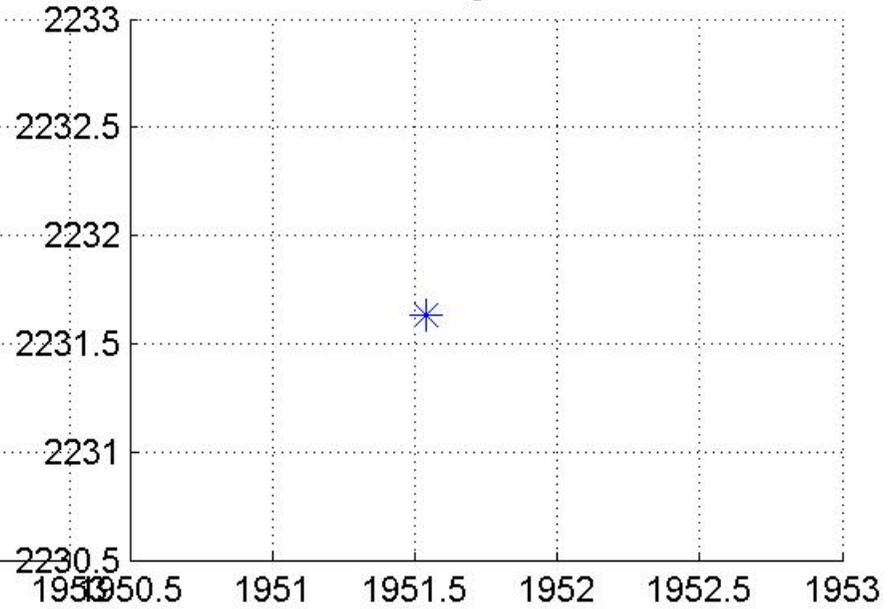
5



Locations



Inside Largest Cluster



Current Image = 2541



1



2



3



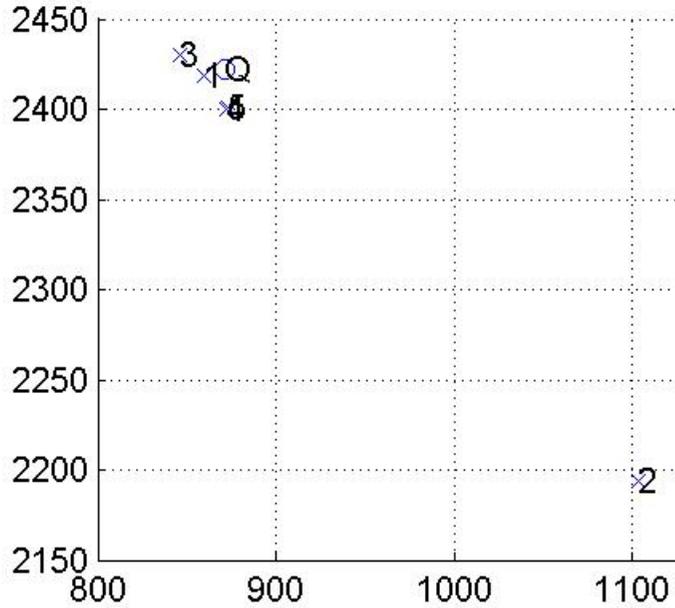
4



5



Locations



Inside Largest Cluster

