Identifying the Geographic Location of an Image with a Multimodal Probability Density Function

Jamie Davies jagd1g11@ecs.soton.ac.uk

Jonathon S. Hare jsh2@ecs.soton.ac.uk

Sina Samangooei ss@ecs.soton.ac.uk

John Preston jlp1g11@ecs.soton.ac.uk

Neha Jain nj1g12@ecs.soton.ac.uk David P. Dupplaw dpd@ecs.soton.ac.uk

Electronics and Computer Science, University of Southampton, United Kingdom

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Run 1	✓	✓	✓	√	
Run 2	✓		✓	✓	
Run 3	✓	√			
Run 4	√	√		√	
Run 5	✓	✓	✓	√	✓

Table 1: The feature configuration for the run submissions.

ABSTRACT

The geotagging of a photos location provides data that could be useful in a wide spectrum of applications. With the advance of digital cameras, and with many users exchanging their digital cameras for their GPS-enabled mobile phones, photographs annotated with geographical locations are becoming ever more present on photo-sharing websites such as Flickr. However there is still a wide majority of online content that is not geotagged, meaning that algorithms for efficient and accurate geographical estimation of an image are needed. We present a general model for using both textual metadata and visual features of photos to automatically place them on a world map. This forms the University of Southampton's entry for the MediaEval 2013 Placing task.

Keywords

Geotagging, Probability Density, Image Annotation

- 1. INTRODUCTION AND MOTIVATION
- 2. OVERALL METHODOLOGY
- 3. EXPERIMENTS

- 3.1 Run 1: Text+Visual, provided data
- 3.2 Run 2: Visual only, provided data
- 3.3 Run 3: Text only, provided data
- 3.4 Run 4: Text+Visual, bigger dataset
- 3.5 Run 5: Text+Visual, provided data with tag boosting
- 3.6 Results and Discussion
- 4. CONCLUSIONS AND FUTURE WORK

5. ACKNOWLEDGMENTS

The described work was funded by the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreements 270239 (ARCOMEM), and 287863 (TrendMiner).