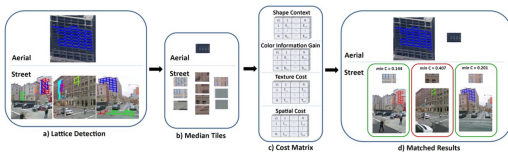
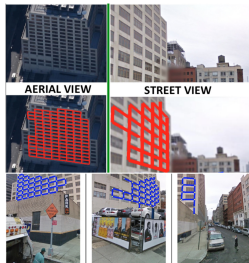


Regularity-Driven Building Facade Matching between Aerial and Street Views

M. Wolff, R. T. Collins, and Y. Liu (CVPR 2016)



- ▶ Detecting and matching building facades between aerial view and street-view images
- ▶ Challenges beyond patch matching and ground-level-only wide-baseline facade matching
- ▶ Exploiting the regularity of urban scene facades
- ▶ Using a lattice and its associated median tiles (motifs) as the basis for matching
- ▶ Joint regularity optimization problem, seeking well-defined features that reoccur across both facades to serve as match indicators
- ▶ Matching costs based on edge shape contexts, color features, and Gabor filter responses
- ▶ Evaluated on three cities
- ▶ Superior performance over baselines SIFT, Root-SIFT, and Scale- Selective Self-Similarity and Binary Coherent Edge descriptors