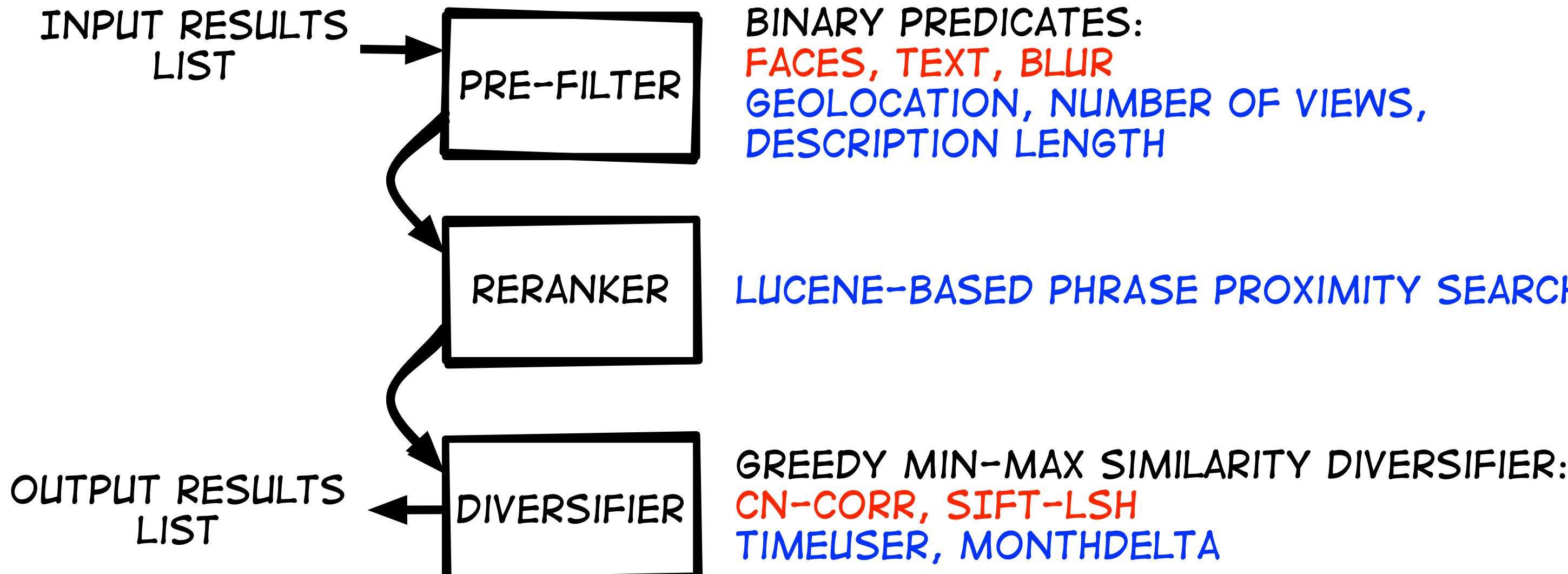


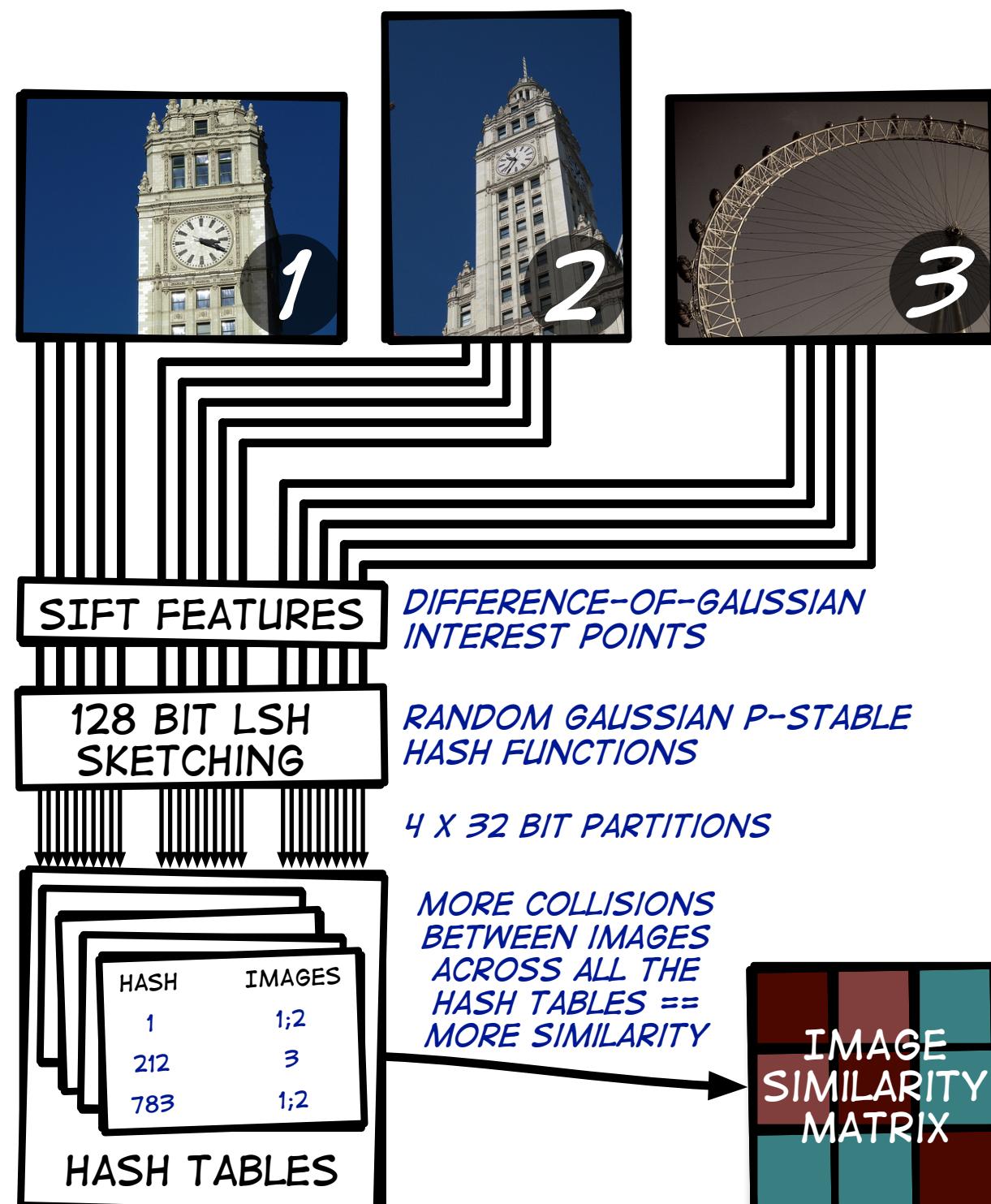
OVERALL APPROACH



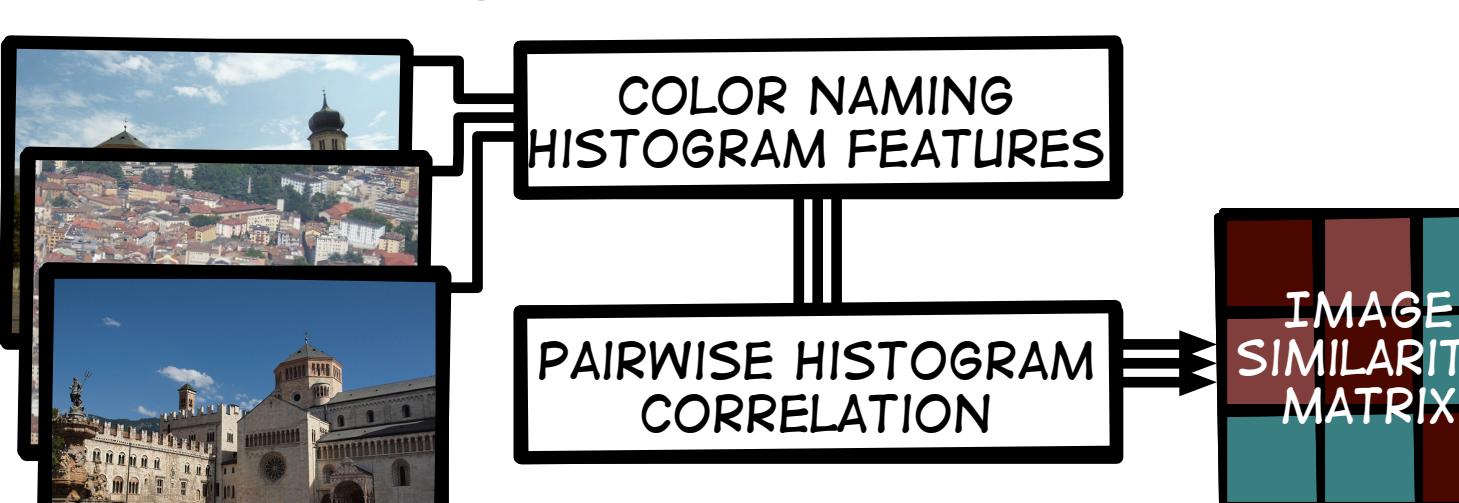
DIVERSIFICATION FEATURES

FEATURES ARE EXTRACTED AND COMPARED TO PRODUCE SIMILARITY MATRICES FOR INPUT TO THE DIVERSIFIER

SIFT-LSH IMAGE SIMILARITY

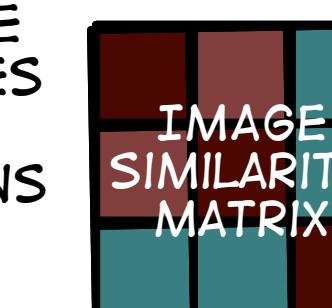


CN-CORR



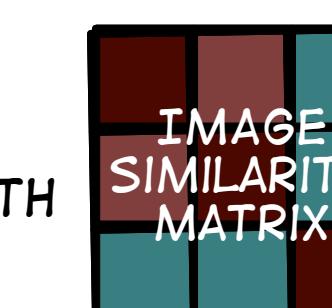
TIMEUSER

SIMILARITY MATRIX CONSTRUCTED WITH THE FOLLOWING CONSTRAINTS: PAIRS OF IMAGES TAKEN A LESS THAN A MINUTE APART HAD SIMILARITY 1; IMAGES MORE THAN 3.25 MINS APART HAD 0 SIMILARITY. BETWEEN 1 AND 3.25 MINUTES THE SIMILARITY FALLS OFF LOGARITHMICALLY.



MONTHDELTA

LIKE TIMEUSER FEATURE; IMAGES HAVE INCREASING SIMILARITY WITH CLOSER MONTH OF YEAR.

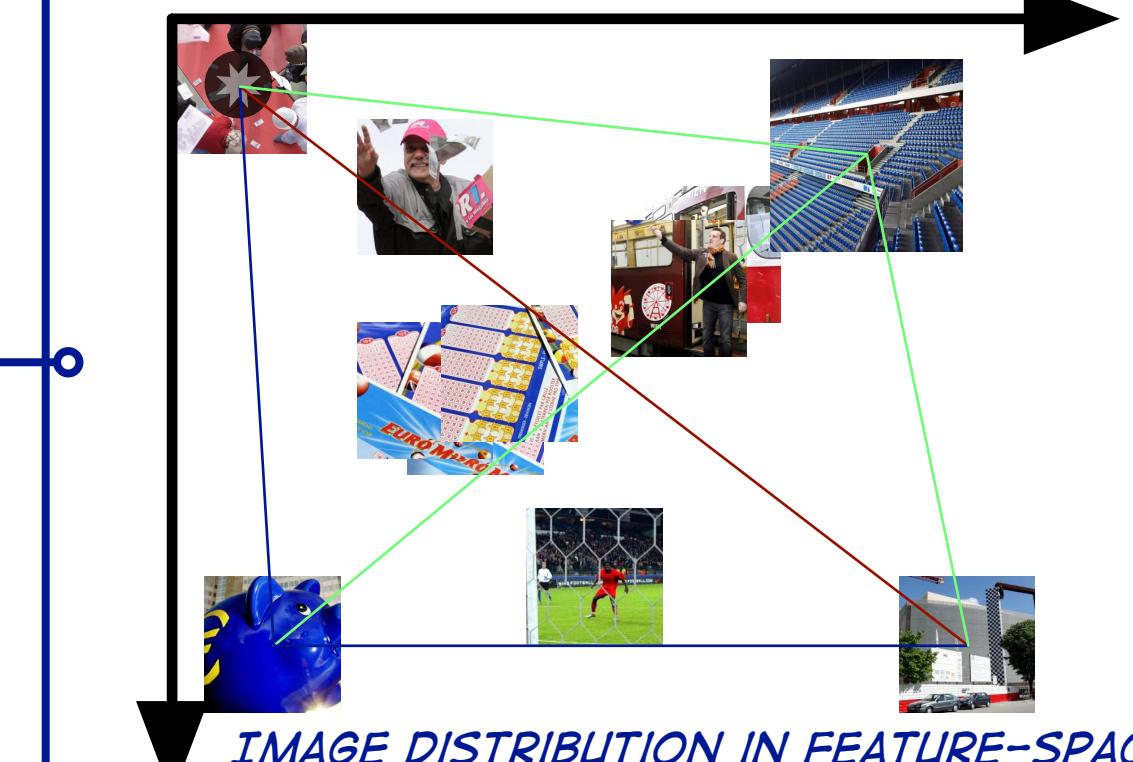


FEATURE COMBINATION

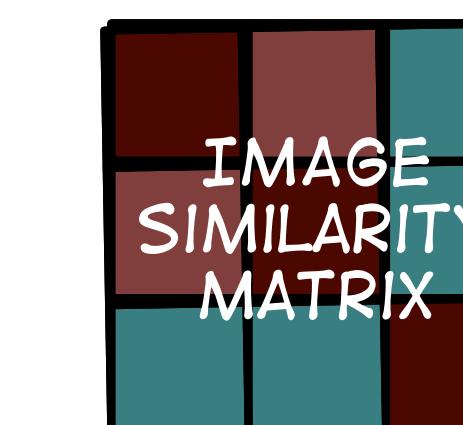
SIMILARITY MATRICES FROM THE DIFFERENT FEATURES WERE AVERAGED TO MAKE THE INPUT TO THE DIVERSIFIER

$$= \frac{1}{N} \sum_{n=1}^N \text{SIMILARITY MATRIX}_n$$

DIVERSIFIER



GREEDY MIN-MAX SIMILARITY DIVERSIFIER



RUN CONFIGURATIONS

PRE-FILTERS

RUN	VISUAL			META/TEXTUAL		
	FACE	BLUR	TEXT	GEO	VIEWS	DLEN
1	✓	✓	✓			
2				✓	✓	✓
3		✓	✓	✓	✓	✓

RERANKER AND FEATURES

RUN	RERANKER	VISUAL		META/TEXTUAL		
		CN CORR	SIFT LSH	TIME USER	MONTH DELTA	
1			✓			
2		✓		✓		
3	✓		✓	✓	✓	

RESULTS

EXPERT EVALUATION

RUN	P@10	CR@10	F1@10
1	0.70	0.41	0.49
2	0.82	0.43	0.54
3	0.82	0.44	0.55

CROWDWORKER EVALUATION (AVG)

RUN	P@10	CR@10	F1@10
1	0.66	0.75	0.67
2	0.77	0.74	0.73
3	0.77	0.75	0.73

TITLE

EXPERIMENTS IN DIVERSIFYING FLICKR RESULT SETS

CLIENT

MEDIAEVAL 2013
RETRIEVING DIVERSE SOCIAL IMAGES

POWERED BY



TEAM

SOTON-WAIS
(UNIVERSITY OF SOUTHAMPTON)

MEMBERS

NEHA JAIN, JONATHON HARE, SINA SAMANGOOEI,
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SEVENTH FRAMEWORK
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