

Image Databases are Proliferating we need search tools



Scanners



Digital cameras



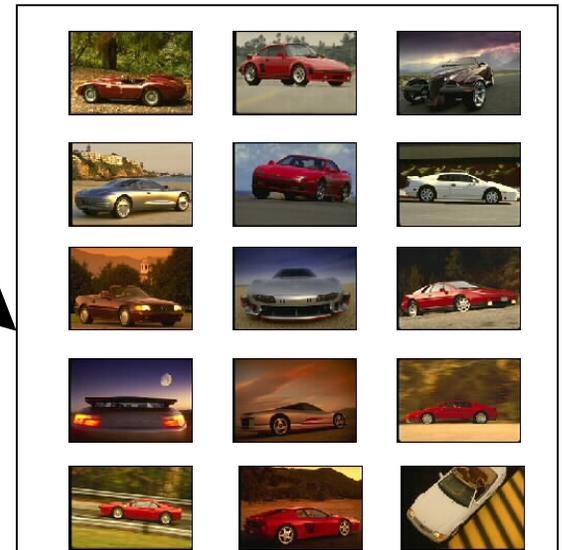
Video cameras



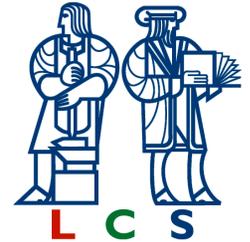
Image Databases



Query

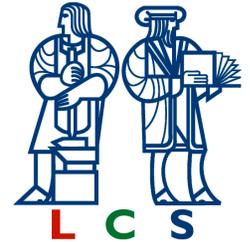


Retrieval results



Progress Through December 1999

- ¥ New paradigm for Image Database Search
 - Pre-compute many features for each image (50,000)
 - Perform retrieval using only those which matter most
 - ¥ Using < 1000 features
- ¥ New algorithms for face detection
 - Using a statistical model for images
- ¥ Algorithms for document understanding & retrieval
 - Determine mathematical formula from text
- ¥ New algorithm for query learning
 - Much faster than before uses 10 or 20 features
 - More accurate



Research Plan for the Next Six Months

- ¥ Incorporate new types of Media
 - Video and Virtual Reality
- ¥ Further refine the query learning process
- ¥ Incorporate Segmentation into image analysis
- ¥ Acquire new image databases