# Summary

# Embedding learning

- Learns with ever expanding label set

- Used in many large scale DL applications

# Example: Face recognition



- Fixed label set
  - Face detection

- Expanding label set

  - Face re-identification

Obama          Obama          Clinton

same          different
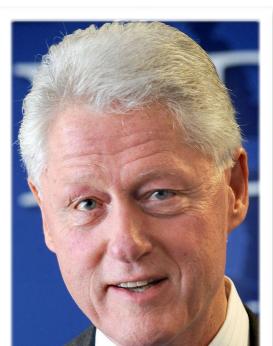
# Example: Image retrieval and visual search

- No fixed label set

  - Sometimes: No labels at all

  - Comparisons only

query



results