Paper review :

A Comparative Evaluation of Feature Extraction and Similarity
Measurement Methods for Content-based Image Retrieval

• Abstract:

- A feature vector is created after color and/or texture and/or shape features extraction. Then similar images are retrieved using different similarity measures.
- color moment and wavelet packet entropy features are most effective whereas color autocorrelogram, wavelet moment, and invariant moment features show narrow result.

• Materials and Methods:

- For content based Image retrieval, we first extract the image feature using various feature extraction methods and then similar image are retrieved using various similarity measurement methods

• Conclusion

- Experimental results show that the best accuracy is found for color moment and wavelet packet entropy feature for the standardized L2 measure.

$$x \left\{ \begin{array}{c} (\psi_{1} * x)^{+} \\ (\psi_{2} * x)^{+} \\ \vdots \\ (\psi_{N} * x)^{+} \end{array} \right\} \left\{ \begin{array}{c} (\sum_{i}^{N} \psi_{1i} * (\psi_{i} * x)^{+})^{+} \\ \sum_{j}^{M} \phi_{2j} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \\ \sum_{j}^{M} \phi_{2j} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \\ \sum_{j}^{N} \phi_{3j} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \end{array} \right\} \left\{ \begin{array}{c} \sum_{i}^{N} \phi_{k} * \sum_{j}^{M} \phi_{kj} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \end{array} \right\} \left\{ \begin{array}{c} \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \end{array} \right\} \left\{ \begin{array}{c} \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \end{array} \right\} \left\{ \begin{array}{c} \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \end{array} \right\} \left\{ \begin{array}{c} \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \end{array} \right\} \left\{ \begin{array}{c} \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ji} * (\psi_{i} * x)^{+})^{+} \end{array} \right\} \left\{ \begin{array}{c} \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+})^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+})^{+} \end{array} \right\} \left\{ \begin{array}{c} \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+})^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+})^{+} \end{array} \right\} \left\{ \begin{array}{c} \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+})^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+})^{+} \end{array} \right\} \left\{ \begin{array}{c} \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+} \end{array} \right\} \left\{ \begin{array}{c} \sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+} \\ \sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+} \\ \sum_{i}^{N} \phi_{kj} * (\sum_{i}^{N} \psi_{ij} * (\psi_{i} * x)^{+} \\ \sum_{i}^{$$

