Multispectral image characterization by Partial generalized covariance
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Goal
Assessment of attribute variability ('sensitivity') for non-Euclidean distances ('similarity measures')

Method

Applications

Remote Sensing

Euclidean distance

Partial spectral pixels in 8-neighborhood

Pearson correlation

Food analysis

Pixel and channel variability

Conclusions

Applications

→ Measure-specific attribute assessment by path integral of its derivatives.
→ Attribute redundancies are a matter of distance measure.
→ Partially connected data → local contrast enhancement.
→ Generalized covariance time complexity: $O(t \cdot n^2 \cdot d^2)$.

References
R-Program code: http://mi.informatik.uni-siegen.de/projects_data/dp.zip

DFG Graduate Research Training Group 1564