

<i>... a practical ... system does not make perfect match...</i>	Biometrics: A Grand Challenge
<i>... has increasingly been recognized as a powerful segmentation...</i>	Watershed segmentation using prior shape and appearance knowledge
<i>... is a common technique for image segmentation. However, its use...</i>	Watershed segmentation using prior shape and appearance knowledge
<i>... is a technique for marking sharp intensity changes, and is important in further analyzing...</i>	Edge detection improvement by ant colony optimization
<i>... is an important processing step in many image, video and computer vision applications. ...</i>	Image Segmentation Evaluation: A Survey of Unsupervised Methods
<i>... is efficient in solving tree-like problems. Furthermore, the constructive...</i>	Edge detection improvement by ant colony optimization
<i>... is important in several fields such as robotics, remote sensing, and imagery. ...</i>	Old and new straight-line detectors: Description and comparison
<i>... is widely used for contrast enhancement in a variety of applications...</i>	Contrast Enhancement Using Brightness Preserving Bi-Histogram Equalization
<i>... often carry important information about an object, when shown as large gradient magnitude...</i>	Edge detection improvement by ant colony optimization
<i>... operator [8] is a second derivative operator that is...</i>	Laplacian Operator-Based Edge Detectors
<i>... refers to the process of evaluating the structural similarity of graphs. ...</i>	Approximate graph edit distance computation by means of bipartite graph matching
<i>A curce pyramid and an image pyramid are built in a similar way. ...</i>	Corner detection and curve segmentation by multiresolution chain-code linking
<i>A minutiae-based template is a very compact representation of a fingerprint...</i>	Fingerprint Image Reconstruction from Standard Templates
<i>A multiresolution description of planar curves using corners and the curve pyramid...</i>	A Syntactic Approach to Scale-Space-Based Corner Description
<i>A new ... criterion is formulated for segmenting small objects by...</i>	Thresholding based on variance and intensity contrast
<i>A shape similarity measure useful for shape-based...</i>	Application of planar shape comparison to object retrieval database
<i>A similarity measure for silhouettes of 2D objects is presented, ...</i>	Application of planar shape comparison to object retrieval database
<i>An image I is described by the Cartesian coordinates of its points. We denote...</i>	Old and new straight-line detectors: Description and comparison
<i>An orientability measure determines how orientable a shape is...</i>	Measuring the orientability of Shapes
<i>Another example which shows the limitation of the ... is illustrated...</i>	Contrast Enhancement Using Brightness Preserving Bi-Histogram Equalization
<i>Any linear property of an image is a weiggthed sum of its pixel values...</i>	From Image Analysis to Computer Vision: Motives, Methods, and Milestones
<i>As mentioned in the introduction...</i>	Fast template matching algorithm for contour images based on its chain coded description...
<i>Assume that an arbitrarily object...</i>	Three-dimensional Euclidean distance transformation and its application to shortest path planning
<i>Automated segmentation of images...</i>	Robust Image Segmentation Using Resampling and Shape Constraints
<i>Based on novel lighting compensation technique and a...</i>	Face Detection in Color Images
<i>Before presenting our proposed region-segmentation...</i>	Efficient region segmentation on compressed gray images using quadtree and shading...
<i>Characteristically, many attempts to implement Blum's...</i>	Hierarchic Voronoi skelletons
<i>Contour representations of binary images of handwritten words afford considerable...</i>	Chaincode Contour Processing for Handwritten Word Recognition
<i>Data in a paper document are usually captured by optical scanning...</i>	Document image analysis: A primer
<i>Designing a good measure for ... quality is a known hard problem some researchers even...</i>	Image Segmentation Evaluation: A Survey of Unsupervised Methods
<i>Effective resizing of images should not only use geometri constraints...</i>	Seam Carving for Content-Aware Image Resizing
<i>Elongation consider the covariance matrix constructed from the second...</i>	Measuring the orientability of Shapes
<i>Feature weighting procedures rank features...</i>	Feature selection based on the training set manipulation
<i>For a signal not necessarily in multiresolution spaces, the ... may not be true. ...</i>	On Sampling Theorem, Wavelets, and Wavelet Transforms
<i>For gray-scale images with information that is inherently binary such...</i>	Document image analysis: A primer
<i>For instance, the ability to locate image object such as a face can be exploited...</i>	A Bayesian approach to skin color classification in YCbCr color space
<i>Formally, let I be an $N \times M$ image and define a vertical...</i>	Seam Carving for Content-Aware Image Resizing
<i>From a general point of view, the structural classification...</i>	Collaboration Between Statistical and Structural Approaches for Old Handwritten ...

<i>Given a binary image, it is scanned from top to bottom and right to left and transitions ...</i>	Chaincode Contour Processing for Handwritten Word Recognition
<i>Global or statistical approaches, such as...</i>	Perceptually relevant and piecewise linear matching of silhouettes
<i>Haralicks coefficients are usually calculated from the average co-occurrence matrix...</i>	Increasing the discrimination power of the co-occurrence matrix-based features
<i>However, local appearance is clearly not the only cue to object detection...</i>	Object detection by global contour shape
<i>However, we have to be careful in taking care of the dependencies...</i>	Robust distributed multi-view video compression for wireless camera networks
<i>Image denoising algorithms often assume...</i>	Automatic Estimation and Removal of Noise from a Single Image
<i>Image parts of known shapes can also be detected by template matching...</i>	From Image Analysis to Computer Vision: Motives, Methods, and Milestones
<i>Improving the accuracy of line segment detection reduces the complexity..</i>	Extended Hough transform for linear feature detection
<i>In a ..., the symmetric relationship is represented by undirected edges...</i>	Unsupervised Object Segmentation with a Hybrid Graph Model (HGM)
<i>In assistive systems designed to aid...</i>	Flycatcher: Fusion of Gaze with Hierarchical Image Segmentation for Robust Object Detection
<i>In computer vision there is a long history of work on shape representation...</i>	Application of planar shape comparison to object retrieval database
<i>In most of the existing color image segmentation approaches...</i>	Color image segmentation based on homogram thresholding and region merging
<i>In our face authentication system, the isodensity...</i>	Fast template matching algorithm for contour images based on its chain coded description...
<i>In this article, we introduce a mathematical formalism defining...</i>	Computing the shape of a planar points set
<i>In this paper, a color image segmentation...</i>	Color image segmentation based on homogram thresholding and region merging
<i>In this paper, a new method has been introduced for characterisation ...</i>	Corner detection and curve segmentation by multiresolution chain-code linking
<i>In this paper, we present a novel method to obtain...</i>	Three-dimensional Euclidean distance transformation and its application to shortest path planning
<i>In this paper, we present an on-line...</i>	Sketched Symbol Recognition using Zernike Moments
<i>In this paper, we propose a new method to characterise a curve...</i>	Corner detection and curve segmentation by multiresolution chain-code linking
<i>Interest in computing parametric descriptions of lines and conics in images...</i>	Curve parameterization by Moments
<i>Invariant pattern recognition is desirable in many applications...</i>	Statistical Pattern Recognition: A Review
<i>It is important to note that in bringing the model closer to the image...</i>	Generic Model Abstraction from Examples
<i>Lossless and lossy ... : It is desired to provide...</i>	The JPEG 2000 Still Image Compression Standard
<i>Major differences exist between the moment approach to curve parameterization...</i>	Curve parameterization by Moments
<i>Many visual search and matching systems represent images using sparse set of...</i>	Descriptor Learning for Efficient Retrieval
<i>Moment invariants are important shape descriptors in computer vision...</i>	Fast algorithm for generation of moment invariants
<i>More and more images have been generated...</i>	Review of shape representation and description techniques
<i>Nonetheless, the fact that the approach was proposed more than 30 years ago...</i>	Increasing the discrimination power of the co-occurrence matrix-based features
<i>Planar curves are described by information about corners integrated...</i>	A Syntactic Approach to Scale-Space-Based Corner Description
<i>Planar curves are described by information about...</i>	Transactions on Pattern Analysis and Machine Intelligence
<i>Previous studies have found that pixels belonging to skin region ...</i>	A Bayesian approach to skin color classification in YCbCr color space
<i>Reliable person recognition is an important problem in diverse businesses.</i>	Biometrics: A Grand Challenge
<i>Robust and time-efficient skeletonization of a (planar) shape,...</i>	Hierarchic Voronoi skeletons
<i>Segmentation occurs on two levels. On the first level, if the document contains...</i>	Document image analysis: A primer
<i>Several techniques have been proposed to address the affine...</i>	Parametric estimation of affine deformations of planer shapes
<i>Simultaneously, ... emerged as a powerful and flexible graph matching paradigm that can be...</i>	Approximate graph edit distance computation by means of bipartite graph matching
<i>Since camera blur the incoming light during measurement, different images...</i>	Image Transformations and Blurring
<i>Skeletal trees are commonly used in order to express geometric properties...</i>	Dissimilarity between two skeletal trees in a context

<i>Statistical methods are classical in pattern recognition...</i>	Collaboration Between Statistical and Structural Approaches for Old Handwritten ...
<i>Suppose the input gray image with size $N \times N$ has been compressed...</i>	Efficient region segmentation on compressed gray images using quadtree and shading...
<i>Syntactic analysis is inspired by the phenomenon that composition...</i>	Review of shape representation and description techniques
<i>The ... maps each image pixel into its smallest distance to regions of interest...</i>	2D Euclidean Distance Transform Algorithms: A Comparative Survey
<i>The ... operator-based edge detectors localize edges with the...</i>	Laplacian Operator-Based Edge Detectors
<i>The ... standard has been in use for almost a decade now...</i>	The JPEG 2000 Still Image Compression Standard
<i>The class of unsupervised objective evaluation methods is the only class of...</i>	Image segmentation evaluation: A survey of unsupervised methods
<i>The classical ... has resulted in many applications and generalizations. ...</i>	On Sampling Theorem, Wavelets, and Wavelet Transforms
<i>The color of mouth region contains stronger red...</i>	Face Detection in Color Images
<i>The combination of these three components- stabilisation process,...</i>	Corner detection and curve segmentation by multiresolution chain-code linking
<i>The design of a pattern recognition system essentially...</i>	Statistical Pattern Recognition: A Review
<i>The efficient and sequential EDT algorithms can be classified in terms of the order...</i>	2D Euclidean Distance Transform Algorithms: A Comparative Survey
<i>The extraction of convex hull can be a...</i>	Review of shape representation and description techniques
<i>The global characteristics of the ridge pattern may be described by the orientation ...</i>	Fingerprint Image Reconstruction from Standard Templates
<i>The hierarchical segmentation algorithm produces from an image...</i>	Flycatcher: Fusion of Gaze with Hierarchical Image Segmentation for Robust Object Detection
<i>The Image is partitioned into piecewise smooth...</i>	Automatic Estimation and Removal of Noise from a Single Image
<i>The last appearance (moving from the bottom to the top) of a corner in the pyramid...</i>	A Syntactic Approach to Scale-Space-Based Corner Description
<i>The location and the influence are of the...</i>	A graph-based approach for multiscale shape analysis
<i>The main advantage of a description of patterns by graphs instead of vectors is that...</i>	Approximate graph edit distance computation by means of bipartite graph matching
<i>The main reason for the popularity of ... is its memory compactness. ...</i>	Compressed vertex chain codes
<i>The method exploits the information conveyed by the evolution ...</i>	Feature selection based on the training set manipulation
<i>The Otsu method [10] uses within-class variance for image segmentation...</i>	Thresholding based on variance and intensity contrast
<i>The recognition community has typically avoided bridging...</i>	Generic Model Abstraction from Examples
<i>The second stage of the algorithm performs graph contraction...</i>	Flycatcher: Fusion of Gaze with Hierarchical Image Segmentation for Robust Object Detection
<i>The shape of an object (as conveyed by edge curves) is among...</i>	Rigid Shape Matching by Segmentation Averaging
<i>The study on ... has gained increasing attention in recent years due to the active...</i>	A Bayesian approach to skin color classification in YCbCr color space
<i>The vertices of a ... represent the samples, e.g., superpixels of an image. ...</i>	Unsupervised Object Segmentation with a Hybrid Graph Model (HGM)
<i>This article introduces a method to determine in a robust manner...</i>	Robust threshold estimation for images with unimodal histograms
<i>This edge-matching filter should also make the value of the output noise variance...</i>	Laplacian Operator-Based Edge Detectors
<i>This operator can be used for a variety of image manipulation...</i>	Seam Carving for Content-Aware Image Resizing
<i>This paper has presented two effective shape descriptors...</i>	A graph-based approach for multiscale shape analysis
<i>This paper introduced the formalism of the ideal image, consisting...</i>	Image Transformations and Blurring
<i>This paper introduces three new vertex chain codes. Firstly, considering...</i>	Compressed vertex chain codes
<i>This paper presents two shape descriptors, multiscale...</i>	A graph-based approach for multiscale shape analysis
<i>To achieve these objectives, a novel minimization criterion is proposed. ...</i>	Robust threshold estimation for images with unimodal histograms
<i>To achieve this, we learn a non-linear transformation model by minimizing a novel...</i>	Descriptor Learning for Efficient Retrieval
<i>Typically, the geometric similarity between two shapes is a measure of how well...</i>	Dissimilarity between two skeletal trees in a context
<i>Unfortunately, most vision problem, even those that were first tackled in the 1950's...</i>	From Image Analysis to Computer Vision: Motives, Methods, and Milestones

<i>Upon entering a room, one first notice the presence of a particular object...</i>	Shock Graphs and Shape Matching
<i>We consider the estimation of affine transformations...</i>	Parametric estimation of affine deformations of planer shapes
<i>We detected short line segments with both approaches and compared their results...</i>	Extended Hough transform for linear feature detection
<i>We empirically show that this new algorithm has an average time complexity...</i>	An Efficient Earth Mover's Distance Algorithm for Robust Histogram Comparison
<i>We have been developing a theory for the generic representation...</i>	Shock Graphs and Shape Matching
<i>We present a method for deriving a parametric description of a conic section...</i>	Curve parameterization by Moments
<i>We present a method for object class detection in images based on global shape. ...</i>	Object detection by global contour shape
<i>We propose a novel method of exploiting inter-view correlation...</i>	Robust distributed multi-view video compression for wireless camera networks
<i>We propose EMD-L1: a fast and exact algorithm for computing the ... (EMD)...</i>	An Efficient Earth Mover's Distance Algorithm for Robust Histogram Comparison
<i>We test our constructions on a shape retrieval problem by performing two...</i>	Dissimilarity between two skeletal trees in a context
<i>We use segmentations to match images by shape. The new matching...</i>	Rigid Shape Matching by Segmentation Averaging
<i>When comparing shapes in image databases we have to deal not...</i>	Application of planar shape comparison to object retrieval database
<i>Whilst being ostensibly similar to textual words...</i>	Descriptor Learning for Efficient Retrieval
<i>Zernike moments are not invariant to scale...</i>	Sketched Symbol Recognition using Zernike Moments
<i>Zhang and Lu have tested geometric moment invariants...</i>	Review of shape representation and description techniques