



**14th International Conference on
Computer Analysis of Images and Patterns**

CAIP 2011



Seville (Spain) 29-31 August 2011

**Escuela Técnica Superior de Ingeniería Informática (ETSII)
Universidad de Sevilla**

TABLE OF CONTENTS

Welcome to CAIP 2011!	Page 3
How to reach the Conference place	Page 3
By train	Page 4
By bus	Page 5
By bike	Page 6
How to move inside the Conference building	Page 7
Technical program	Page 9
Monday, August 29 th	Page 9
Tuesday, August 30 th	Page 10
Wednesday, August 31 st	Page 12
Poster List Session I	Page 13
Poster List Session II	Page 16
Poster List Session III	Page 19
Timetable	Page 23
How to connect to Wi-Fi EDUROAM	Page 24
About Social Events	Page 25
Information about REACTS 2011	Page 26
How to reach Malaga from Seville	Page 26
Committees	Page 27
Interesting Websites	Page 28

WELCOME TO CAIP 2011!

We would like to take this opportunity to welcome you to the 14th International Conference on Computer Analysis of Images and Patterns (CAIP 2011), to be held in the E.T.S. de Ingeniería Informática (ETSII) at the University of Seville. On these pages you can find useful information for your participation in the Conference. Please, if you have any problems, do not hesitate to contact any member of the Organizing Committee. We will be delighted to help for anything you may need.

Organizing Committee CAIP 2011

HOW TO REACH THE CONFERENCE PLACE



Escuela Técnica Superior de Ingeniería Informática (ETSII)
Universidad de Sevilla
Avenue Reina Mercedes s/n
41012-Seville (Spain)



By train

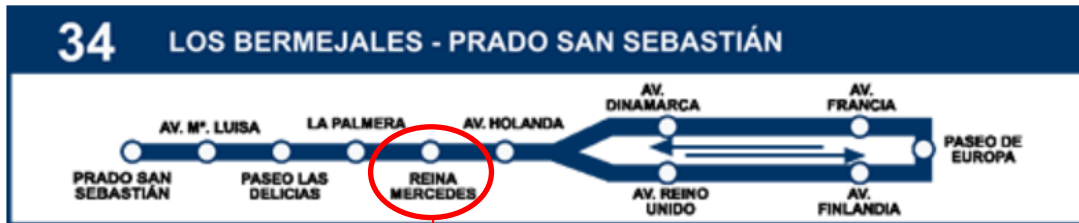
You can catch lines C1, C4 or C5 of “Cercanías” Renfe (Spanish commuter rail system) from Central Station (Santa Justa) or “San Bernardo” Station (near “El Prado”) to “Virgen del Rocío” Station and walk about 1 km. until the Conference place. There are travels each 15 minutes starting from 7.00am to 22.20pm. More info: [Renfe Cercanías](http://www.renfe.es/cercanias).





By bus

Line 34: each 30 minutes from 7.08am to 23.05pm



2nd STOP

Line 6: each 30 minutes from 7.05am to 23.15pm



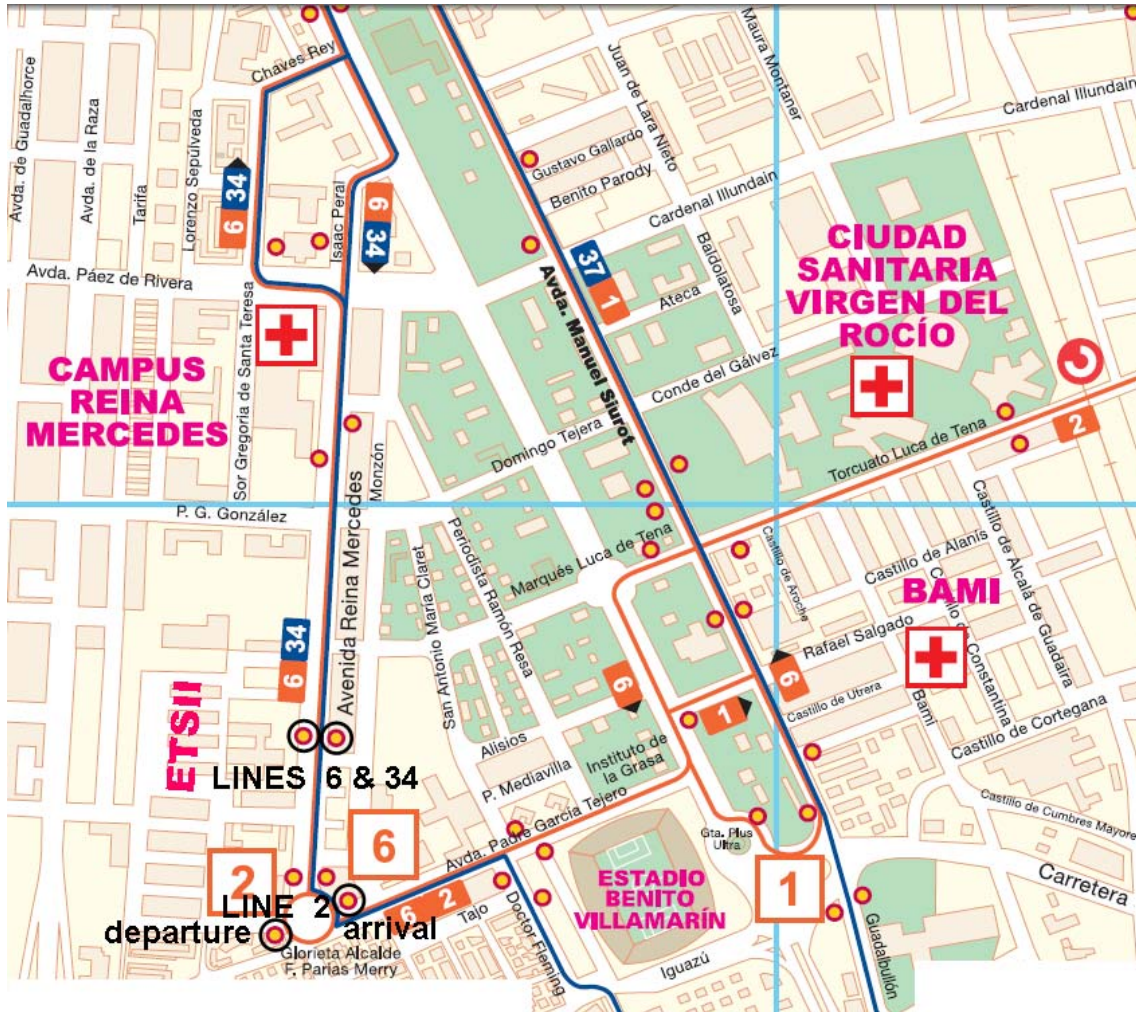
2nd STOP

Line 2: each 15 minutes from 7.01am to 23.01pm



Bus lines 34, 6 & 2 stop near Conference place, although only the first two in front of it.

More info: Tussam



By bike

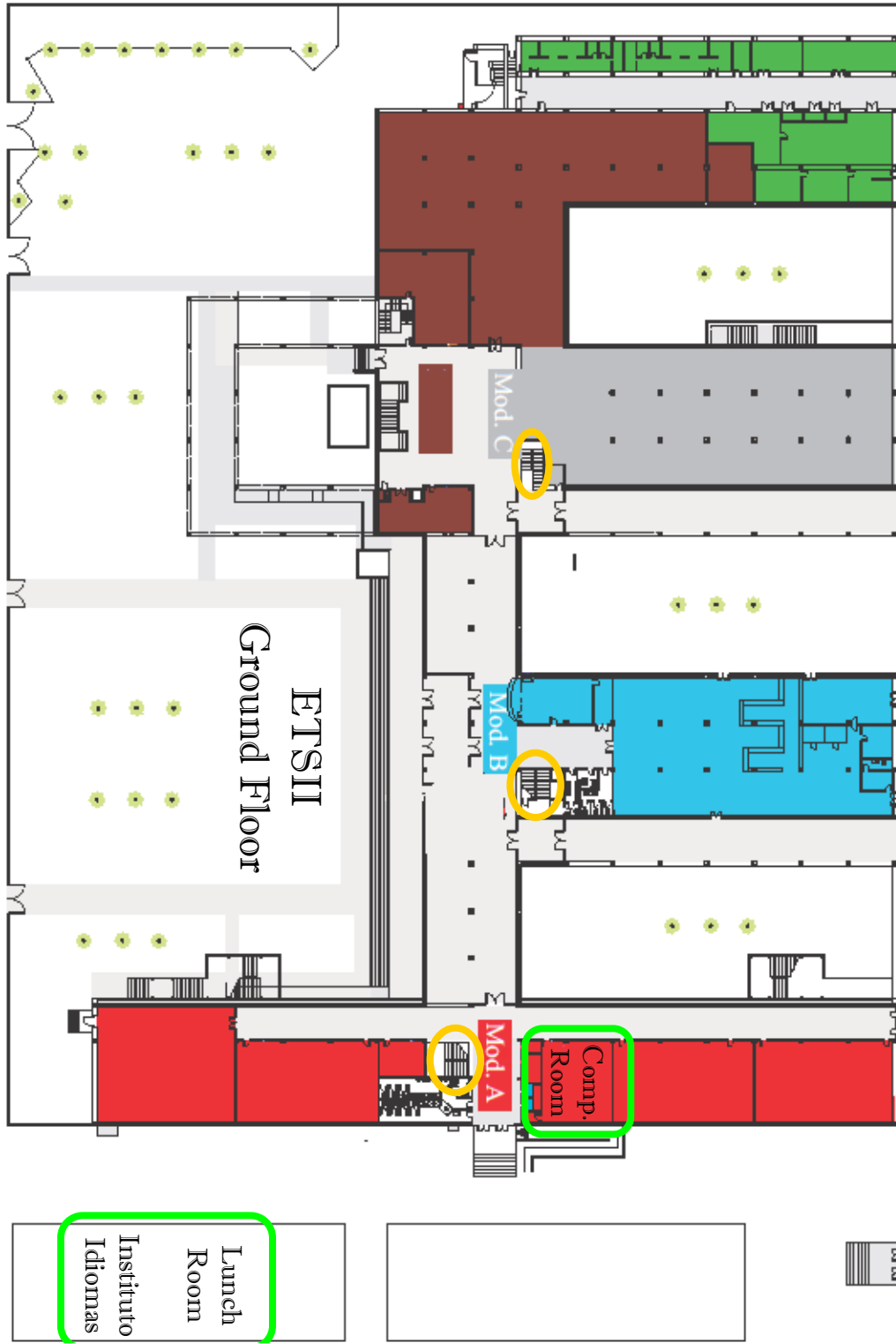
Public service of bicycles: [Sevici](#)

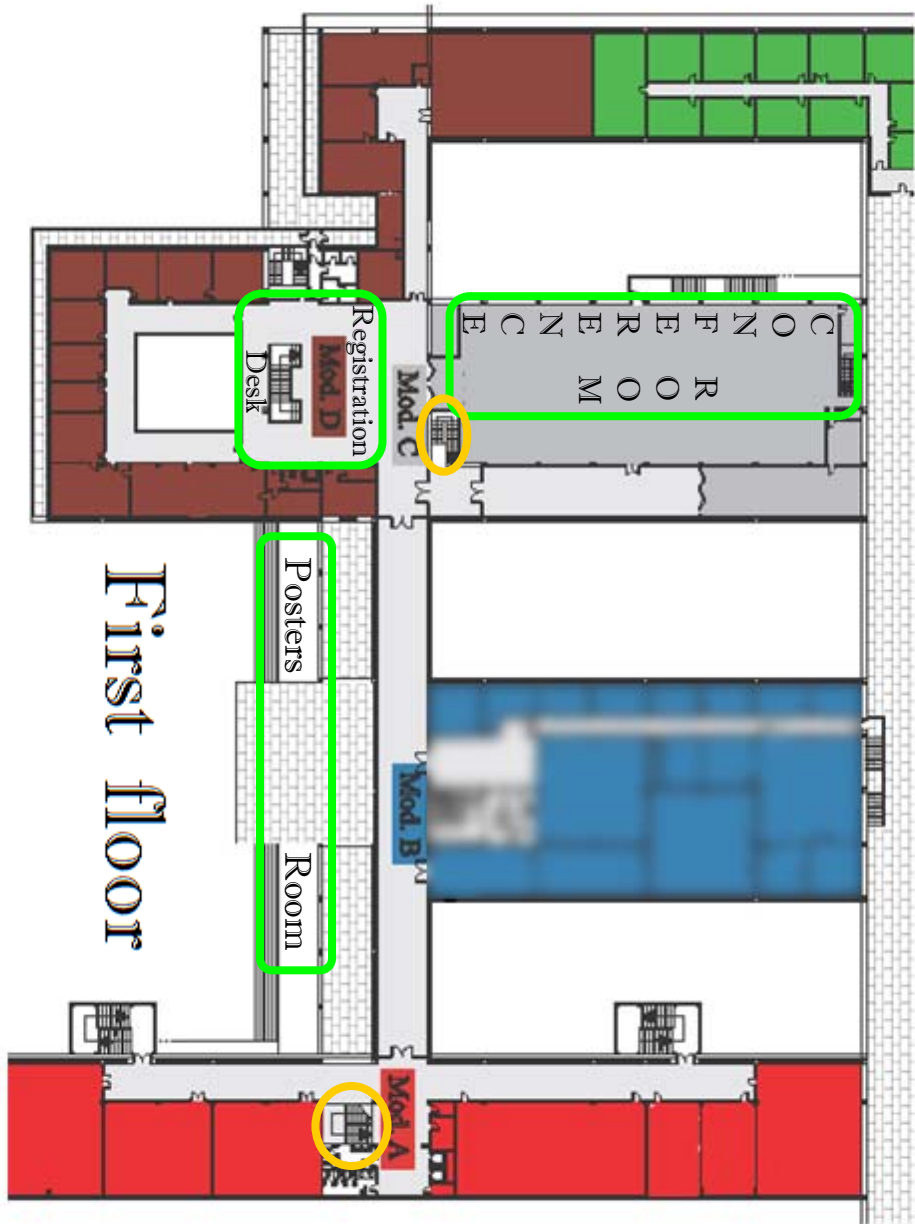
It can obtain easily a subscription for 7 days.

Price for registering in the system for one week: €10.00 + €150.00 deposit (reimbursed except loss or theft of the bicycle).

The first 30 minutes are free. If you need the bicycle more time, simply look for Sevici's station, deposit the bicycle and turn it to taking. If it exceeds 30 minutes without doing this, an amount will be loaded: the first hour after the first 30 minutes costs €1.00, and after the first hour and average, they will be €2.00 per hour. To register, simply go to Sevici's Station with your card of credit, and follow the instructions on the screen.

HOW TO MOVE INSIDE THE CONFERENCE BUILDING





TECHNICAL PROGRAM

Monday, August 29th

08:00 **Registration** (*Registration Desk*)

09:10 **Opening** (*Conference Room*)

09:30 **Invited Lecture** (*Conference Room*)

A historical survey of geometric computer vision.
Peter Sturm (I-1).

10:30 **Session 1: Motion Analysis** (*Conference Room*)

10:30 *Detection Human Motion with Heel Strikes for surveillance analysis.*
Sung Uk Jung and Mark S Nixon (I-9).

10:50 *Detecting Customers' Buying Behavior on a Real-life Database.*
Mirela Popa, Tommaso Gritti, Leon Rothkrantz, Caifeng Shan and Pascal Wiggers (I-17).

11:10 **Coffee break**

11:40 **Session 2: Image and Shape Models** (*Conference Room*)

11:40 *A Simplified Gravitational Model for Texture Analysis.*
Jarbas Sá Junior and André R Backes (I-26).

12:00 *Robustness and modularity of 2-dimensional size functions. An experimental study.*
Silvia Biasotti, Andrea Cerri and Daniela Giorgi (I-34).

12:20 *A homological-based description for subdivided nD objects.*
H. Molina-Abril and P. Real (I-42).

12:40 *Statistical Shape Model of Legendre Moments with Active Contour Evolution for Shape Detection and Segmentation.*
Yan Zhang, Bogdan Matuszewski, Aymeric Histace and Frederic Precioso (I-51).

13:00 **Lunch break** (*Lunch Room – Instituto de Idiomas*)

14:30 Session 3: Segmentation and Grouping (*Conference Room*)

14:30 *Efficient Image Segmentation Using Weighted Pseudo-Elastica.*
Matthias Krueger, Patrice Delmas and Georgy Gimel'Farb (I-59).

14:50 *Automatic conic and line grouping for calibration of central catadioptric camera.*
Wenting Duan and Nigel Allinson (I-68).

15:10 *Color histogram-based image segmentation.*
Giuliana Ramella and Gabriella Sanniti Di Baja (I-76).

15:30 *Arc segmentation in linear time.*
Thanh Phuong Nguyen and Isabelle Debled-Rennesson (I-84).

15:50 *Multi-cue-based Crowd Segmentation in Stereo Vision.*
Ya-Li Hou and Grantham Pang (I-93).

16:10 *Semantic segmentation of microscopic images using a morphological hierarchy.*
Cristian Smochina, Vasile Manta and Walter Kropatsch (I-102).

16:30 Poster highlight presentation (Session I) (*Conference Room*)

17:10 Coffee break
Poster Session I (*Posters Room*)

18:40 Bus from the Conference site

20:00 Guided Tour (Reales Alcazares)

Tuesday, August 30th

09:30 Session 4: Object Detection and Recognition (*Conference Room*)

09:30 *Multi-Class Object Detection with Hough Forests Using Local Histograms of Visual Words.*
Markus Mühling, Ralph Ewerth, Bing Shi and Bernd Freisleben (I-386).

09:50 *Graph Clustering using the Jensen-Shannon Kernel.*
Lu Bai and Edwin Hancock (I-394).

10:10 *CSS-AFFN: A Dataset Representation Model for Active Recognition Systems.*
Elizabeth González (I-402).

10:30 *PCA Enhanced Training Data for Adaboost.*
Arne Ehlers, Florian Baumann and Bodo Rosenhahn (I-410).

10:50 *Psychophysically Inspired Bayesian Occlusion Model to Recognize Occluded Faces.*
Ibrahim Venkat, Ahamad Tajudin Khader, K.G. Subramanian and Philippe de Wilde (I-420).

11:10 Coffee break

11:40 Session 5: Medical Image Analysis (*Conference Room*)

11:40 *Detection of Retinal Vascular Bifurcations by Trainable V4-like Filters.*
George Azzopardi and Nicolai Petkov (I-451).

12:00 *A Method for Identification and Visualization of Histological Image Structures Relevant to the Cancer Patient Conditions.*
Vassili Kovalev, Alexander Dmitruk, Ihar Safonau, Mikhail Frydman and Sviatlana Shelkovich (I-460).

12:20 *A Diffeomorphic Matching Based Characterization of the Pelvic Organ Dynamics.*
Mehdi Rahim, Marc-Emmanuel Bellemare, Nicolas Pirró and Rémy Bulot (I-469).

12:40 *Histogram-based Optical Flow for Functional Imaging in Echocardiography.*
Sönke Schmid, Daniel Tenbrinck, Xiaoyi Jiang, Klaus Schäfers, Klaus Tiemann and Jörg Stypmann (I-477).

13:00 Lunch break (*Lunch Room – Instituto de Idiomas*)

14:30 Poster highlight presentation (*Conference Room*)
Poster Session II (*Posters Room*)

16:30 Coffee break

17:00 Session 6: 3D Vision (*Conference Room*)

17:00 *Tensor Method for Constructing 3D Moment Invariants.*
Tomáš Suk and Jan Flusser (II-212).

17:20 *Multi-Camera 3D Scanning with a Non-rigid and Space-Time Depth Super-Resolution Capability.*
Karima Ouji, Mohsen Ardabilian, Liming Chen and Faouzi Ghorbel (II-220).

17:40 *A New Algorithm for 3D Shape Recognition by Means of the 2D Point Distance Histogram.*
Dariusz Frejlichowski (II-229).

18:00 *Wide Range Face Pose Estimation by Modelling the 3D Arrangement of Robustly Detectable Sub-Parts.*
Thiemo Wiedemeyer, Martin Stommel and Otthein Herzog (II-237).

20:30 **Bus from the Conference site**

21:00 **Gala Dinner** (*Abades Triana Restaurant*)

Wednesday, August 31st

09:30 **Invited Lecture** (*Conference Room*)

Metric structures on datasets: stability and classification of algorithms.
Facundo Mémoli (II-1).

10:30 **Session 7: Image Restoration** (*Conference Room*)

10:30 *Single Image Restoration of Outdoor Scenes.*
Cosmin Ancuti, Codruta Ancuti and Philippe Bekaert (II-245).

10:50 *Exploiting Image Collections for Recovering Photometric Properties.*
Mauricio Diaz and Peter Sturm (II-253).

11:10 **Coffee break**

11:40 **Poster highlight presentation** (*Conference Room*)
Poster Session III (*Posters Room*)

13:20 **Lunch break** (*Lunch Room – Instituto de Idiomas*)

14:40 **Session 8: Tracking and Stereo Vision** (*Conference Room*)

14:40 *Robust Signal Generation and Analysis of Rat Embryonic Heart Rate In Vitro using Laplacian Eigenmaps and Empirical Mode Decomposition.*
Muhammad Khalid Khan Niazi, Muhammad Talal Ibrahim, Mats F. Nilsson, Anna-Carin Sköld, Ling Guan and Ingela Nyström (II-523).

15:00 *Radial symmetry guided particle filter for robust iris tracking.*
Francis Martinez, Andrea Carbone and Edwige Pissaloux (II-531).

15:20 *Spatio-Temporal Stereo Disparity Integration.*
Sandino Morales and Reinhard Klette (II-540).

15:40 *Refractive Index Estimation using Polarisation and Photometric Stereo.*
Gule Saman and Edwin Hancock (II-548).

16:00 *3D Gestural Interaction for Stereoscopic Visualization on Mobile Devices.*
Shahrouz Yousefi, Farid Abedan Kondori and Haibo Li (II-555).

16:20 *Statistical tuning of Adaptive-Weight Depth Map Algorithms.*
John Congote, Alejandro Hoyos, Iñigo Barandiaran, Oscar Ruiz and Diego Acosta (II-563).

16:40 **Closing and Farewell**

Poster List in Session I

Segmentation and Grouping

Normalized Joint Mutual Information Measure for Image Segmentation Evaluation with Multiple Ground-truth Images.

Xue Bai, Yibiao Zhao, Yaping Huang and Siwei Luo (I-110).

Alternating Scheme for Supervised Parameter Learning with Application to Image Segmentation.

Lucas Franek and Xiaoyi Jiang (I-118).

Laser Line Segmentation with dynamic Line Models.

Jost Schnee and Jörg Futterlieb (I-126).

A Convex Active Contour Region-based Model for Image Segmentation.

Quang Tung Thieu, Marie Luong, Jean-Marie Rocchisani and Emmanuel Viennet (I-135).

Probabilistic atlas based segmentation using affine moment descriptors and graph-cuts.

Carlos Platero, María Carmen Tobar, Javier Sanguino, Olga Velasco, Jose Poncela and Victor Rodrigo (I-144).

Shape Recovery

Error bounds on reconstruction of binary images from low resolution scans.
Wagner Fortes and K. Joost Batenburg (I-152).

Tetrahedral Meshing of Volumetric Medical Images Respecting Image Edges.
Michal Spanel, Premysl Krsek, Miroslav Svub and Vit Stancl (I-161).

Measuring Shape Ellipticity.

Mehmet Ali Aktas and Jovisa Zunic (I-170).

Robust Shape and Polarisation Estimation using Blind Source Separation.

Lichi Zhang and Edwin Hancock (I-178).

Graph-based Methods and Representations

Hierarchical Representation of Discrete Data on Graphs.

Moncef Hidane, Olivier Lézoray and Abderrahim Elmoataz (I-186).

From Points to Nodes: Inverse Graph Embedding through A Lagrangian Formulation.

Francisco Escolano and Edwin Hancock (I-194).

K-nn queries in Graph Databases using M-Trees.

Francesc Serratosa and Albert Sole (I-202).

User-Steered Image Segmentation Using Live Markers.

Thiago Vallin Spina, Alexandre Xavier Falcão and Paulo André Vechiatto Miranda (I-211).

Kernelising the Ihara Zeta Function.

Furqan Aziz, Richard Wilson and Edwin Hancock (I-219).

A Hypergraph-based Approach to Feature Selection.

Zhihong Zhang and Edwin Hancock (I-228).

Curves, Surfaces and Objects beyond 2 dimensions

Hypersurface fitting via Jacobian nonlinear PCA on Riemannian space.

Jun Fujiki and Shotaro Akaho (I-236).

A Robust Approach To Multi-Feature Based Mesh Segmentation Using Adaptive Density Estimation.

Tilman Wekel and Olaf Hellwich (I-244).

Shape Description by Bending Invariant Moments.

Paul Rosin (I-253).

Fast Shape Re-ranking with Neighborhood Induced Similarity Measure.

Chunyuan Li, Changxin Gao, Sirui Xing and Abdessamad Ben Hamza (I-261).

Dynamic Radial Contour Extraction by Splitting Homogenous Areas.

Christopher Malon and Eric Cosatto (I-269).

Robust hyperplane fitting based on k-th power deviation and alpha-quantile.

Jun Fujiki, Shotaro Akaho, Hideitsu Hino and Noboru Murata (I-278).

Geo-topological Analysis of Images

Incremental-Decremental Algorithm for Computing AT-models and Persistent Homology.

Rocio Gonzalez-Diaz, Adrian Ion, Maria Jose Jimenez and Regina Poyatos (I-286).

Persistent Betti numbers for a noise tolerant shape-based approach to image retrieval.

Patrizio Frosini and Claudia Landi (I-294).

A Spanning Tree-based Human Activity Prediction System Using Life Logs from Depth Silhouette-based Human Activity Recognition.

Md. Zia Uddin, Kyung Min Byun, Min Hyoung Cho, Soo Yeol Lee, Tae-Seong Kim and Gon Khang (I-302).

Characterizing obstacle-avoiding paths using cohomology theory.

Pawel Dlotko, Walter Kropatsch and Hubert Wagner (I-310).

MAESTRO: Making Art-Enabled Sketches Through Randomized Operations.

Subhro Roy, Rahul Chatterjee, Partha Bhowmick and Reinhard Klette (I-318).

Kernel Methods

Improved working set selection for LaRank.

Matthias Tuma and Christian Igel (I-327).

Multi-task Learning via Non-sparse Multiple Kernel Learning.

Wojciech Samek, Alexander Binder and Motoaki Kawanabe (I-335).

Multiple Random Subset-Kernel Learning.

Kenji Nishida, Jun Fujiki and Takio Kurita (I-343).

Getting robust observation for single object tracking: A statistical kernel-based approach.

Mohd Asyraf Zulkifley (I-351).

Image and Video Indexing and Database Retrieval

Visual Words on Baggage X-ray Images.

Muhammet Bastan, Mohammad Reza Yousefi and Thomas Breuel (I-360).

Image Re-Ranking and Rank Aggregation based on Similarity of Ranked Lists.

Daniel Carlos Guimarães Pedronette and Ricardo Da S. Torres (I-369).

A cartography of spatial relationships in a symbolic image database.

Nguyen Vu Hoang, Valérie Gouet-Brunet and Marta Rukoz (I-377).

Poster List in Session II

Medical Imaging

No-reference Quality Metrics for Eye Fundus Imaging.

Andres G. Marrugo, Maria S. Millan, Gabriel Cristobal, Salvador Gabarda and Hector C. Abril (I-451).

Adaptive Medical Image Denoising Using Support Vector Regression.

Dinh Hoan Trinh, Marie Luong, Jean-Marie Rocchisani, Françoise Dibos and Canh Duong Pham (I-494).

Cortex segmentation in reconstructed fetal MRI by using structural constraints.

Benoît Caldaïrou, Nicolas Passat, Piotr Habas, Colin Studholme, Mériam Koob, Jean-Louis Dietemann and François Rousseau (I-503).

Evaluation of Facial Reconstructive Surgery on Patients with Facial Palsy using Optical Strain.

Matthew Shreve, Neeha Jain, Dmitry Goldgof, Walter Kropatsch, Chieh-Han John Tzou and Manfred Frey (I-512).

Inferring the Performance of Medical Imaging Algorithms.

Aura Hernández-Sabaté, Debora Gil, David Roche, Monica M.S. Matsumoto and Sergio S. Furuie (I-520).

Glaucoma Classification Based on Histogram Analysis of Diffusion Tensor Imaging Measures in the Optic Radiation.

Ahmed El-Rafei, Tobias Engelhorn, Simone Waerntges, Arnd Doerfler, Joachim Hornegger and Georg Michelson (I-529).

Textural Classification of Abdominal Aortic Aneurysm after Endovascular Repair: Preliminary Results.

Guillermo García, Josu Maiora, Arantxa Tapia and Mariano De Blas (I-537).

Deformable registration for Geometric distortion correction of diffusion tensor imaging.

Xufeng Yao and Zhijian Song (I-545).

Automatic localization and quantification of intracranial aneurysms.

Sahar Hassan, Franck Hetroy, François Faure and Olivier Palombi (I-554).

Object Recognition

Unsupervised Feature Selection and Category Formation for Generic Object Recognition.

Hirokazu Madokoro, Masahiro Tsukada and Kazuhito Sato (I-427).

Object Recognition with the HOSVD of the Multi-Model Space-Variant Pattern Tensors.
Boguslaw Cyganek (I-435).

Structural Pattern Recognition

A New Ensemble-Based Cascaded Framework for Multiclass Training with Simple Weak Learners.
Teo Susnjak, Andre Barczak, Napoleon Reyes and Ken Hawick (I-563).

Mutual Information Based Gesture Recognition.
Peter Harding, Michael Topsom and Nicholas Costen (I-571).

Logitboost Extension for Early Classification of Sequences.
Tomoyuki Fujino, Katsuhiko Ishiguro and Hiroshi Sawada (I-579).

Determining the Cause of Negative Dissimilarity Eigenvalues.
Weiping Xu, Richard Wilson and Edwin Hancock (I-589).

Robust Model-Based Detection of Gable Roofs in Very-High-Resolution Aerial Images.
Lykele Hazelhoff and Peter De With (I-598).

Biometrics

Semi-Fragile Watermarking in Biometric Systems: Template Self-Embedding.
Reinhard Huber, Herbert Stögner and Andreas Uhl (II-34).

The Weighted Landmark-Based Algorithm for Skull Identification.
Jingbo Huang, Mingquan Zhou, Fuqing Duan, Qingqong Deng and Zhongke Wu (II-42).

Sequential Fusion using Correlated Decisions for Controlled Verification Errors.
Vishnu Priya Nallagatla and Vinod Chandran (II-49).

An Online Three-stage Method for Facial Point Localization.
Weiyuan Ni, Ngoc-Son Vu and Alice Caplier (II-57).

Extraction of Teeth Shapes from Orthopantomograms for Forensic Human Identification.
Dariusz Frejlichowski and Robert Wanat (II-65).

Effects of JPEG XR Compression Settings on Iris Recognition Systems.
Kurt Horvath, Herbert Stögner and Andreas Uhl (II-73).

A Recursive Sparse Blind Source Separation Method for Nonnegative and Correlated Data in NMR Spectroscopy.
Yuanchang Sun and Jack Xin (II-81).

Human and Face Detection and Recognition

A Novel Face Recognition Approach under Illumination Variations based on Local Binary Pattern.
Zhichao Lian, Meng Joo Er and Juekun Li (II-89).

A New Human Detection Descriptor Based on the Use of Spatial Recurrences.
Carlos Serra-Toro and V. Javier Traver (II-97).

Facial Expression Recognition using Nonrigid Motion Parameters and Shape-from-shading.
Fang Liu, Edwin Hancock and William Smith (II-105).

TIR/VIS Correlation for Liveness Detection in Face Recognition.
Lin Sun, Waibin Huang and Minghui Wu (II-114).

Person Localization and Soft Authentication using an Infrared Ceiling Sensor Network.
Shuai Tao, Mineichi Kudo, Hidetoshi Nonaka and Jun Toyama (II-122).

Document Analysis

Categorization of Camera Captured Documents Based on Logo Identification.
Venkata Gopal Edupuganti and Frank Shih (II-130).

Multiple Line Skew Estimation of Handwritten Images of Documents Based on a Visual Perception Approach.
Carlos Mello, Angel Sanchez and George Cavalcanti (II-138).

Applications

Space Variant Representations for Mobile Platform Vision Applications.
Naveen Onkarappa and Angel D. Sappa (II-146).

JBoost Optimization of Object Detectors for Autonomous Underwater Vehicle Navigation.
Christopher Barngrover, Serge Belongie and Ryan Kastner (II-155).

Combining Structure and Appearance for Anomaly Detection in Wire Ropes.
Esther-Sabrina Wacker and Joachim Denzler (II-163).

3D Cascade of Classifiers for Open and Closed Eye Detection in Driver Distraction Monitoring.

Mahdi Rezaei and Reinhard Klette (II-171).

Non-Destructive Detection of Hollow Heart in Potatoes Using Hyperspectral Imaging.

Angel Dacal-Nieto, Arno Formella, Pilar Carrion, Esteban Vazquez-Fernandez and Manuel Fernandez-Delgado (II-180).

Dice Recognition in Uncontrolled Illumination Conditions by Local Invariant Features.

Gee-Sern Hsu and Hsiao-Chia Peng (II-188).

Specularity Detection Using Time-of-Flight Cameras.

Faisal Mufti and Robert Mahony (II-196).

Symmetry Computation in Repetitive Images using Minimum-variance Partitions.

Manuel Agustí-Melchor, Angel Rodas-Jordá and José M. Valiente-González (II-204).

Poster List in Session III

Restoration

Human Visual System for complexity reduction of image and video restoration.

Vittoria Bruni, Domenico Vitulano and Daniela De Canditiis (II-261).

Optimal Image Restoration using HVS-based Rate-Distortion Curves.

Vittoria Bruni, Elisa Rossi and Domenico Vitulano (II-269).

Natural Computation for Digital Imagery

A Parallel Implementation of the Thresholding Problem by Using Tissue-Like P Systems.

Francisco Peña-Cantillana, Daniel Díaz-Pernil, Ainhoa Berciano and Miguel Angel Gutiérrez-Naranjo (II-277).

P Systems in Stereo Matching.

Radu Nicolescu, Georgy Gimel'Farb and Sharvin Ragavan (II-285).

Functional brain mapping by methods of evolutionary natural selection.

Mohammed Sadeq Al-Rawi and João Paulo Silva Cunha (II-293).

Interactive Classification of Remote Sensing Images by using Optimum-Path Forest and Genetic Programming.

Jefersson Alex Dos Santos, André Tavares Da Silva, Ricardo Da Silva Torres, Alexandre Xavier Falcão and Rubens A. C. Lamparelli (II-300).

A Dynamic Niching Quantum Genetic Algorithm for Automatic Evolution of Clusters.

Dongxia Chang and Yao Zhao (II-308).

Image and Video Processing

Spatio-Temporal Fuzzy FDPA Filter.

Marek Szczepański (II-316).

Graph aggregation based image modeling and indexing for video annotation.

Najib Ben Aoun, Haytham Elghazel, Mohand-Said Hacid and Chokri Ben Amar (II-324).

Violence Detection in Video Using Computer Vision Techniques.

Enrique Bermejo Nievas, Oscar Deniz Suarez, Gloria Bueno García and Rahul Sukthankar (II-332).

Speckle denoising through local Rényi entropy smoothing.

Gabriel Cristobal and Salvador Gabarda (II-340).

Multiresolution Optical Flow Computation of Spherical Images.

Yoshihiko Mochizuki and Atsushi Imiya (II-348).

An Improved SalBayes Model with GMM.

Hairu Guo, Xiaojie Wang, Yixin Zhong and Song Bi (II-356).

Exploring alternative spatial and temporal dense representations for action recognition.

Pau Agustí Ballester, V. Javier Traver Roig, Manuel J. Marin-Jimenez and Filiberto Pla Bañón (II-364).

Image denoising using bilateral filter in high dimensional PCA-Space.

Quoc Bao Do, Azeddine Beghdadi and Marie Luong (II-372).

Image super resolution using sparse image and singular values as priors.

Subrahmanyam Ravishankar, Challapalle Nagadastagiri Reddy and Chintakunta Vishnu Vardhan Reddy (II-380).

Improved Gaussian Mixture Model for the Task of Object Tracking.

Ronan Sicre and Henri Nicolas (II-389).

Driver's Fatigue and Drowsiness Detection to reduce Traffic Accidents on Road.
Nawal Alioua, Aouatif Amine, Mohammed Rziza and Driss Aboutajdine
(II-397).

Image Synthesis Based on Manifold Learning.
Andrés Marino Alvarez-Meza, Juliana Valencia-Aguirre, Genaro Daza-Santacoloma, Carlos Daniel Acosta-Medina and Germán Castellanos-Domínguez (II-405).

Hierarchical Foreground Detection in Dynamic Background.
Guoliang Lu, Mineichi Kudo and Jun Toyama (II-413).

Image Super-resolution based Wavelet Framework with Gradient Prior.
Yan Xu, Xueming Li and Chingyi Suen (II-421).

Are Performance Differences of Interest Operators Statistically Significant?
Nadia Kanwal, Shoaib Ehsan and Adrian F. Clark (II-429).

Calibration

Accurate and Practical Calibration of a Depth and Color Camera Pair.
Daniel Herrera C., Juho Kannala and Janne Heikkila (II-437).

Color and Texture

Contourlet-Based Texture Retrieval Using a Mixture of Generalized Gaussian Distributions.
Mohand Said Allili and Nadia Baaziz (II-446).

Evaluation of Histogram-Based Similarity Functions for Different Color Spaces.
Andreas Zweng, Thomas Rittler and Martin Kampel (II-455).

Color Contribution to Part-Based Person Detection in Different Types of Scenarios.
Muhammad Anwer Rao, David Vázquez and Antonio M. López (II-463).

Content Adaptive Image Matching by Color-Entropy Segmentation and Inpainting.
Yuanchang Sun and Jack Xin (II-471).

Face Image Enhancement Taking into Account Lighting Behavior on a Face.
Masato Tsukada, Chisato Funayama, Masatoshi Arai and Charles Dubout
(II-479).

Adaptive Matrices for Color Texture Classification.
Kerstin Bunte, Ioannis Giotis, Nicolai Petkov and Michael Biehl (II-489).

Color Texture Classification Using Rao Distance Between Multivariate Copula Based Models.

Ahmed Drissi El Maliani, Mohammed El Hassouni, Yannick Berthoumieu and Driss Aboutajdine (II-498).

Texture analysis based on saddle points-based BEMD and LBP.

Jianjia Pan and Yuanyan Tang (II-506).

A Robust Approach to Detect Tampering by Exploring Correlation Patterns.

Lu Li, Jianru Xue, Xiaofeng Wang and Lihua Tian (II-515).

MONDAY 29th		TUESDAY 30th		WEDNESDAY 31th	
8:00 – 9:10	Registration				8:00 – 9:10
9:10 – 9:30	Opening	Registration		Registration	9:10 – 9:30
9:30 – 10:30	Invited Lecture	Session 4: Object detection and recognition	Coffee-break	Invited Lecture	9:30 – 10:30
10:30 – 11:10	Session 1: Motion Analysis			Session 7: Image Restoration	10:30 – 11:10
11:10 – 11:40	Coffee-break			Coffee-break / Poster Session III	11:10 – 11:40
11:40 – 13:00	Session 2: Image and Shape Models	Session 5: Medical Image Analysis		Poster highlight presentation and Poster Session III	11:40 – 13:00
13:00 – 13:20	Lunch break	Lunch break		Lunch break	13:00 – 13:20
13:20 – 14:30					13:20 – 14:30
14:30 – 14:40					14:30 – 14:40
14:40 – 16:30	Session 3: Segmentation and Grouping	Poster highlight presentation and Poster Session II		Session 8: Tracking and Stereo Vision	14:40 – 16:30
16:30 – 16:40	Poster highlight presentation (Session I)	Coffee-break		Coffee-break	16:30 – 16:40
16:40 – 17:00					16:40 – 17:00
17:00 – 17:10					17:00 – 17:10
17:10 – 18:20	Coffee-break / Poster Session I	Session 6: 3D Vision			17:00 – 17:10
18:40	Bus from the Conference site				
20:00	Guided tour (Reales Alcázares)	Bus from the Conference site Gala Dinner (Abades Triana Restaurant)			
20:30					
21:00					

HOW TO CONNECT TO WI-FI **EDUROAM**

CAIP attendants will be able to get wi-fi connection using EDUROAM. The website <http://eduroam.us.es/> explains how to connect to, being available tutorials for the operating systems [Windows XP](#), [Windows Vista/7](#), [Mac YOU](#), [Linux](#), [Open 1x](#), [iPhone YOU](#), [Android](#), [Symbian](#) and [Windows Mobile](#). EDUROAM does not allow the access without authentication. The parameters to connect are the following

User-name (UVUS): caip2011@visitantes
Password: 2011caip2011

We suggest the attendants ask for the configuration of their computers in their own universities to avoid any connection problem.

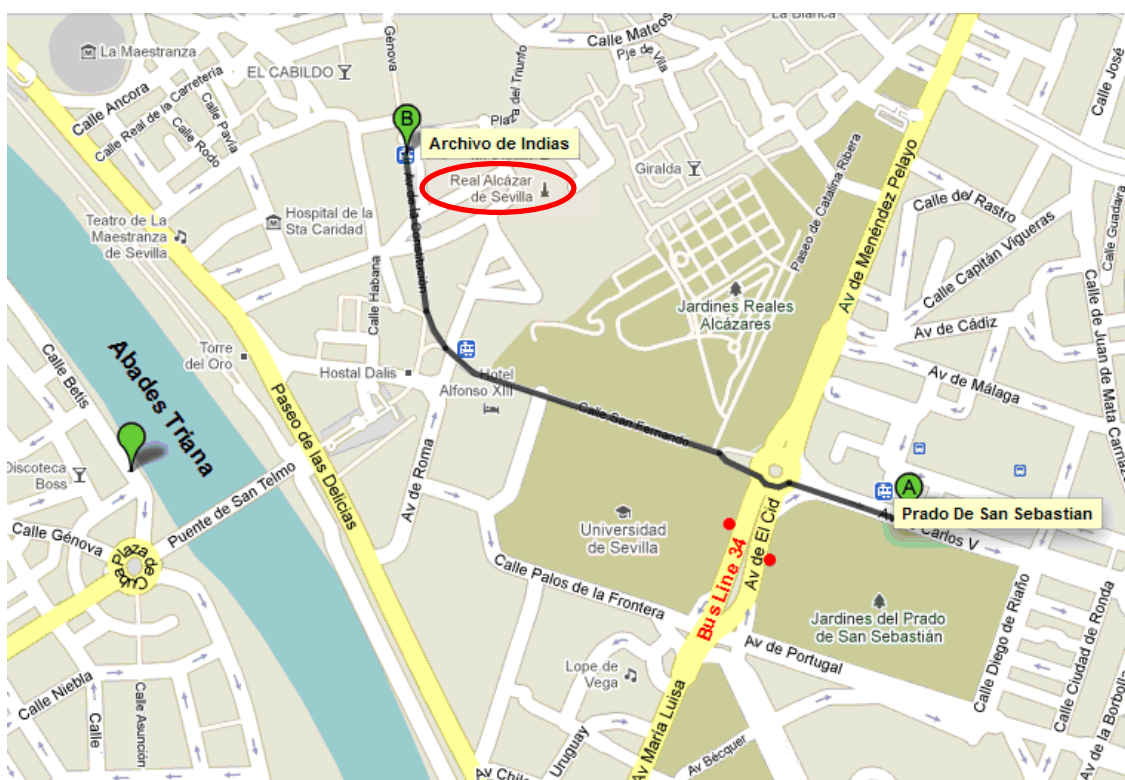
For more information, please contact any member of Organizing Committee at the Registration Desk.

ABOUT SOCIAL EVENTS

The Conference includes two social events:

- A guided tour to Reales Alcázares (August 29th)
- Gala Dinner in Abades Triana Restaurant (August 30th)

In order to access Reales Alcázares, you can arrive from El Prado either on foot (in ten minutes) or by catching the tram (MetroCentro) and getting down at “Archivo de Indias” Stop. Each travel costs €1.30.



Abades Triana Restaurant is placed at the main street of Triana neighbourhood, at Betis Street, a restaurant whose large glass room results in a spectacular window to the city. The Restaurant can hold up to 400 people. “The Cube” is a privileged area of the restaurant which appears to be hanging in the air, floating on Guadalquivir River. We will discover the best International and Mediterranean cuisine!!!

INFORMATION ABOUT REACTS 2011

The 1st Workshop on Recognition and Action for Scene Understanding (REACTS) is a satellite event of the 14th International Conference of Computer Analysis of Images and Patterns (CAIP) which will be hold in Malaga, Spain, September 1–2 2011. More info: [REACTS2011](#)

Reaching Malaga from Seville



By train

There exist two services between Santa Justa Renfe Seville Train Station and “María Zambrano” Renfe Malaga Train Station. More info here: [Renfe Sevilla-Malaga](#).

The *high-speed regional train* AVANT travels from Seville to Malaga 5 times a day. The travel takes 2 hours. AVANT leaves at 6.50am, 8.55am, 12.35pm, 15:40pm and 19.35pm. The price is about €40.00.

The *regular regional train* MD travels from Seville to Malaga 5 times a day. The travel takes 2 hours and 30 minutes. MD leaves at 7.40am, 11.10am, 13.05pm, 17:25pm and 20.10pm. The price is about €12.00.



By bus

From Seville Bus Station (El Prado) to Malaga Bus Station (in Paseo de los Tilos) there exist six buses covering the route according to the following schedule:

Seville:	07.00	08.00	12.00	15.00	16.00	20.30
Malaga:	11.00	10.30	14.45	17.45	20.45	23.15

All the travels cost less than €40.00. More info here: [Alsa](#).

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INTERESTING WEBSITES

CAIP 2011: <http://congreso.us.es/caip2011/>

REACTS 2011: <http://www.reacts2011.uma.es/>

IAPR: <http://www.iapr.org/>

Springer: <http://www.springer.com/?SGWID=0-102-0-0-0>

LNCS: <http://www.springer.com/computer/lncs?SGWID=0-164-0-0-0>

Seville tourism information: http://www.sevilla.org/front-page?set_language=en.

Information about Seville: <http://www.sevillaonline.es/english/seville/>

University of Seville: <http://www.us.es/eng>

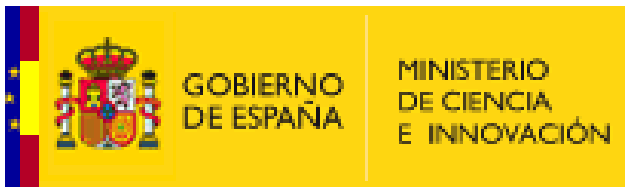
Real Alcázar de Sevilla: <http://www.patronato-alcazarsevilla.es/index.php>

Abades Triana: <http://www.abadestriana.com/en/>

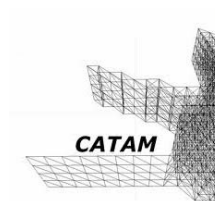
Seville San Pablo Airport: <http://www.sevilla-airport.com/en/index.php>

Malaga Airport: <http://www.aena-aeropuertos.es/csee/Satellite/Aeropuerto-Malaga/en/Page/1048858947193/>

International Barajas Airport: <http://www.madrid-airport.info/>



Vicerrectorado de Investigación



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