






Technical Sessions (TS) – Schedule

	Main Track
	Computers & Graphics (Special Section on SIBGRAPI 2016)
	Computers & Graphics (Invited Papers)

TS1 (CV/IP) – Computer Vision and Pattern Recognition I

Wednesday (Oct, 5)

9:00 – 10:45

Chair: Erickson Rangel do Nascimento (UFMG)

TS1.1 - Personalized Visual Simulation and Objective Validation of Low-Order Aberrations of the Human Eye

Matheus Krueger (INF-UFRGS), Manuel Oliveira (INF-UFRGS), Airton Kronbauer (CORS)

TS1.2 - Fast Saliency Detection Using Sparse Random Color Samples and Joint Upsampling

Maiko Min Ian Lie (UTFPR), Gustavo Borba (UTFPR), Hugo Vieira Neto (UTFPR), Humberto Gamba (UTFPR)

TS1.3 - FOMP: A Novel Preprocessing Technique to Speed-Up the Outlier Removal from Matched Points

Jonathan Ramos (ICMC-USP), Carolina Watanabe (UNIR), Agma Traina (ICMC-USP)

TS1.4 - Unsupervised Similarity Learning through Cartesian Product of Ranking References for Image Retrieval Tasks

Lucas Valem (UNESP-Rio Claro), Daniel Pedronette (UNESP-Rio Claro)

TS1.5 - Facial Compliance for Travel Documents

Igor Andrezza (VSoft Tecnologia), Erick Cabral de Lima Borges (VSoft Tecnologia), Rajiv Albino Mota (VSoft Tecnologia), João Brasileiro (UFCEG)

TS2 (CG) – Computational Geometry & Modeling

Wednesday (Oct, 5)

9:00 – 10:45

Chair: Rafael P. Torchelsen (UFPE)

TS2.1 - Interactive Editing of C^1 -Continuous 2D Spline Deformations Using ECLES Method

Elisa de Cássia Rodrigues (IC-UNICAMP), Jorge Stolfi (IC-UNICAMP)

TS2.2 - Partial Similarity of 3D Shapes using Cross Recurrence Plot

Rafael Nakanishi (ICMC-USP), Jorge Henrique Ono (New York University), Paulo Pagliosa (UFMS), Luis Gustavo Nonato (ICMC-USP), Afonso Paiva (ICMC-USP)

TS2.3 - Estimating Affine-Invariant Structures on Triangle Meshes

Thales Vieira (UFAL), Dimas Martinez (UFAM), Maria Andrade (UFS), Thomas Lewiner (École Polytechnique)

TS2.4 - Reducing the Number of Points on the Convex Hull Calculation Using the Polar Space Subdivision in E^2

Vaclav Skala (University of West Bohemia), Michal Smolik (University of West Bohemia), Zuzana Majdisova (University of West Bohemia)

TS2.5 - Convex Hull for Probabilistic Points

F. Betul Atalay (TOBB University of Economics and Technology), Sorelle Friedler (Haverford College), Dianna Xu (Bryn Mawr College)

TS3 (CV/IP) – Biomedical Imaging I

Wednesday (Oct, 5)

15:45 – 17:30

Chair: Alexandre Falcão (IC-UNICAMP)

TS3.1 - A New Descriptor for Retrieving 3D Objects Applied in Congestive Heart Failure Diagnosis

Helton Biscaro (EACH-USP), Hellyan Oliveira (EACH-USP), Leila Bergamasco (EACH-USP), Fátima Nunes (EACH-USP)

TS3.2 - Using 3D Texture and Margin Sharpness Features on Classification of Small Pulmonary Nodules

Ailton Felix (UFAL), Marcelo Oliveira (UFAL), José Ferreira (FMRP-USP), Aydano Machado (UFAL)

TS3.3 - Information Theory-based Detection of Noisy Bit Planes in Medical Images

Hugo de Oliveira (UFMG), Jefersson dos Santos (UFMG), Matheus de Melo (UFPB), Thaís do Rêgo (UFPB), Leonardo Batista (UFPB)

TS3.4 - A View-independent Line-Coding Colormap for Diffusion Tensor Imaging

Shin-Ting Wu (FEEC-UNICAMP), Raphael Voltoline (FEEC-UNICAMP), Clarissa L. Yasuda (FCM-UNICAMP)

TS4 (CV/IP) – Surveillance and Biometrics

Thursday (Oct, 6)

9:00 – 10:45

Chair: Carlos Eduardo Thomaz (FEI)

TS4.1 - Detecting Crowd Features in Video Sequences

Rodolfo Favaretto (PUCRS), Leandro Dohl (PUCRS), Soraia Musse (PUCRS)

TS4.2 - Ranking Principal Components in Face Spaces Through AdaBoost.M2 Linear Ensemble
Tiene Filisbino (LNCC), Gilson Giraldo (LNCC), Carlos Thomaz (FEI)

TS4.3 - A Data Augmentation Methodology to Improve Age Estimation using Convolutional Neural Networks
Ítalo de Pontes Oliveira (UFCG), João Lucas Peixoto (UFCG), Vinícius Fernandes de Sousa (UFCG), Adalberto Gomes Teixeira Júnior (UFCG), Eanes Torres Pereira (UFCG), Herman Martins Gomes (UFCG)

TS4.4 - Single Sample Face Recognition from Video via Stacked Supervised Auto-encoder
Pedro J. Soto Vega (PUC-Rio), Raul Queiroz Feitosa (PUC-Rio & UERJ), Victor Hugo Ayma Quirita (PUC-Rio), Patrick Nigri Happ (PUC-Rio)

TS5 (CG) – Rendering and Volume Exploration
Special Session: Celebrating Luiz Velho's 60th birthday
Thursday (Oct, 6)
9:00 – 10:45
Chair: Leandro A. F. Fernandes (UFF)

TS5.1 - A Hierarchical Factorization Method for Efficient Radiosity Calculations
José Pedro Aguerre (Universidad de la República), Eduardo Fernández (Universidad de la República)

TS5.2 - Improving the Selection of Bases of BRDFs for Appearance Preservation
Fernando Nascimento (UFS), André de Carvalho (UFS), Beatriz Andrade (UFS)

TS5.3 - Graph-based Interactive Volume Exploration
Daniel P. Barboza (UFRJ), Marcos S. Araujo (UFRJ), Ricardo Marroquim (UFRJ)

TS5.4 - Interactive Visualization of the Cranio-Cerebral Correspondences for 10/20, 10/10 and 10/5 Systems
José Angel Iván Rubianes Silva (FEEC-UNICAMP), Fabio Enrique Suarez Burgos (FCM-UNICAMP), Wu Shin-Ting (FEEC-UNICAMP)

TS6 (CV/IP) – Biomedical Imaging II
Thursday (Oct, 6)
14:00 – 15:45
Chair: João Paulo Papa (UNESP-Bauru)

TS6.1 - Retinal Vessel Segmentation Using Parallel Grayscale Skeletonization Algorithm and Mathematical Morphology
Jardel Rodrigues (IFCE), Nivando Bezerra (IFCE)

TS6.2 - Enhancing the Visualization of the Microvasculature of Extrahepatic Bile Ducts Obtained from Confocal Microscopy Images
Lizeth Beltran (INF-UFRGS), Jorge dos Santos (Universidade da Beira Interior), Carolina Cruz (FAMED-UFRGS), Carla Freitas (INF-UFRGS)

TS6.3 - Interactive Medical Image Segmentation by Statistical Seed Models
Thiago Vallin Spina (IC-UNICAMP), Samuel Botter Martins (IC-UNICAMP), Alexandre Falcão (IC-UNICAMP)

TS6.4 - A Novel Method for Detecting the Fovea in Fundus Images of the Eye
Pedro Moura (UNIPAMPA), Diego Kreutz (UNIPAMPA), Daniel Welfer (UFMS)

TS7 (CV/IP) – Remote Sensing and Image Segmentation

Thursday (Oct, 6)

16:15 – 18:00

Chair: Jefersson dos Santos (UFMG)

TS7.1 - Learning to Classify Seismic Images with Deep Optimum-Path Forest
Luis Afonso (UFSCar), Alexandre Vidal (IGE-UNICAMP), Michelle Kuroda (IGE-UNICAMP), Alexandre Falcão (IC-UNICAMP), João Papa (UNESP-Bauru)

TS7.2 - Learning to Combine Spectral Indices with Genetic Programming
Juan Albarracín (IC-UNICAMP), Jefersson dos Santos (UFMG), Ricardo Torres (IC-UNICAMP)

TS7.3 - A Boosting-based Approach for Remote Sensing Multimodal Image Classification
Edemir Andrade Jr. (UFMG), Arnaldo de Albuquerque Araújo (UFMG), Jefersson dos Santos (UFMG)

TS7.4 - A Graph-Based Approach for Contextual Image Segmentation
Gustavo Souza (UFSCar), Gabriel Alves (UFSCar & Embrapa Instrumentação), Alexandre Magalhães Levada (UFSCar), Paulo Cruvinel (Embrapa Instrumentação & UFSCar), Nilceu Marana (UNESP-Bauru & UFSCar)

TS7.5 - Oriented Image Foresting Transform Segmentation: Connectivity Constraints with Adjustable Width
Lucy Alsina Choque Mansilla (IME-USP), Paulo André Vechiatto de Miranda (IME-USP)

TS8 (CV/IP) – Computer Vision and Pattern Recognition II

Friday (Oct, 7)

09:00 – 10:45

Chair: David Menotti (UFPR)

TS8.1 - A Data Fusion Architecture Proposal for Visually Impaired People
Natal Cordeiro (IFSP-Votuporanga & UFSCar), Antonio Miguel Dourado (IFSP-Boituva & UFSCar), Gustavo Quirino (UFSCar), Emerson Pedrino (UFSCar)

TS8.2 - Analysis of the Eyes on Face Images for Compliance with ISO/ICAO Requirements
Erick Cabral de Lima Borges (VSoft Tecnologia), Igor Andrezza (VSoft Tecnologia), José Raphael Marques (VSoft Tecnologia), Rajiv Albino Mota (VSoft Tecnologia), João Brasileiro (UFCEG)

TS8.3 - A High Density Colored 2D-Barcode: CQR Code-9
Max Vizcarra Melgar (UnB), Mylène Farias (UnB), Flávio de Barros Vidal (UnB), Alexandre Zagheto (UnB)

TS8.4 - Temporal- and Spatial-Driven Video Summarization Using Optimum-Path Forest
Guilherme Martins (UNESP-Bauru), Jurandy Almeida (UNIFESP), João Papa (UNESP-Bauru)

TS8.5 - Assessing Facial Image Accordance to ISO/ICAO Requirements
Rodrigo Parente (UFPB), Igor Andrezza (VSoft Tecnologia), Erick Cabral de Lima Borges (VSoft Tecnologia), Rajiv Albino Mota (VSoft Tecnologia), Leonardo Batista (UFPB)

TS9 (VIS) – Information Visualization

Friday (Oct, 7)

09:00 – 10:45

Chair: Marcos Lage (UFF)

TS9.1 - Facing the High-Dimensions: Inverse Projection with Radial Basis Functions
Elisa Amorim (University of Calgary), Emilio Vital Brazil (University of Calgary), Jesús Mena-Chalco (UFABC), Luiz Velho (IMPA), Luis Gustavo Nonato (ICMC-USP), Faramarz Samavati (University of Calgary), Mario Costa Sousa (University of Calgary)

TS9.2 - Depth Functions as a Quality Measure and for Steering Multidimensional Projections
Douglas Cedrim (ICMC-USP), Viktor Vad (TU Wien), Afonso Paiva (ICMC-USP), Eduard Gröller (VRVIS Research Center), Luis Gustavo Nonato (ICMC-USP), Antonio Castelo Filho (ICMC-USP)

TS9.3 - iStar (i*): An Interactive Star Coordinates Approach for High Dimensional Data Exploration
Germain Garcia (Universidad Católica San Pablo), Luis Gustavo Nonato (ICMC-USP), Erick Gomez-Nieto (IBM Research)

TS9.4 - Visual Analysis of Bike-Sharing Systems
Guilherme N. Oliveira (INF-UFRGS), Jose L. Sotomayor (INF-UFRGS), Rafael Torchelsen (UFPEl), Claudio T. Silva (New York University), João Luiz Dihl Comba (INF-UFRGS)

TS9.5 - Understanding Attribute Variability in Multidimensional Projections
Lucas Pagliosa (ICMC-USP), Paulo Pagliosa (UFMS), Luis Gustavo Nonato (ICMC-USP)

TS10 (CV/IP) – Image/Video Processing

Friday (Oct, 7)

14:00 – 15:45

Chair: Leticia Rittner (FEEC-UNICAMP)

TS10.1 - Transmitting What Matters: Task-oriented Video Composition and Compression
Fernanda Andaló (SAMSUNG Research), Otávio A. B. Penatti (SAMSUNG Research), Vanessa Testoni (SAMSUNG Research)

TS10.2 - Enhancement of Underwater Images in Low-to-High Turbidity Rivers
Daily Rodrigues (IFAM), Wagner de Barros (IFNMG), José de Queiroz-Neto (IFAM), Anderson Fontoura (UFAM), José Reginaldo Carvalho (UFAM)

TS10.3 - Improving Non-Local Video Denoising with Local Binary Patterns and Image Quantization

Welinton Contato (ICMC-USP), Tiago Nazare (ICMC-USP), Gabriel Paranhos da Costa (ICMC-USP), Moacir Ponti (ICMC-USP), João Batista Neto (ICMC-USP)

TS10.4 - Multi-scale Morphological Image Simplification Based on Extrema Relationships: Improvements and Applications

Darwin Danilo Saire Pilco (IC-UNICAMP), Neucimar Jerônimo Leite (IC-UNICAMP)

TS10.5 - Kernel Approximations for W -operator Learning

Igor Montagner (IME-USP), Roberto Hirata (IME-USP), Nina S. T. Hirata (IME-USP), Stéphane Canu (University of Rouen)

TS11 (CG) – Information Visualization, Vector Fields, Simulation, and Tools

Friday (Oct, 7)

14:00 – 15:45

Chair: Afonso Paiva (ICMC-USP)

TS11.1 - MSKDE - Using Marching Squares to Quickly Make High Quality Crime Hotspot Maps
José Queiroz Neto (UFC), Emanuele Santos (UFC), Creto Vidal (UFC)

TS11.2 - Helmholtz–Hodge Decomposition and the Analysis of 2D Vector Field Ensembles
Paula Ceccon Ribeiroa (PUC-Rio), Haroldo Fraga de Campos Velho (INPE), Hélio Lopes (PUC-Rio)

TS11.3 - A Levels-of-Precision Approach for Simulating Multiple Physics-based Soft Tissues
Daniele Silva (INF-UFRGS), Iago Berndt (INF-UFRGS), Rafael Torchelsen (UFPEl), Anderson Maciel (INF-UFRGS)

TS11.4 - Using Change-sets to Achieve a Bounded Undo and Make Tutorials in 3D Version Control Systems

Rafael Telles Vieira (UFC), Guillaume Vialaneix (New York University), Claudio T. Silva (New York University), Joaquim Cavalcante-Neto (UFC), Creto Vidal (UFC)

TS11.5 - Method Based on Triangulation for Sensor Deployment on 3D Surfaces

Renan Nespolo (UNESP-São José do Rio Preto), Leandro Alves Neves (UNESP-São José do Rio Preto), Guilherme Roberto (UNESP-São José do Rio Preto), Matheus Ribeiro (UNESP-São José do Rio Preto), Marcelo Zanchetta do Nascimento (UFU), Adriano Cansian (UNESP-São José do Rio Preto)

TS12 (CV/IP) – Object and Gesture Recognition

Friday (Oct, 7)

16:15 – 18:00

Chair: William Robson Schwartz (UFMG)

TS12.1 - Efficient Object Recognition Using Sampling of Keypoint Triples and Keygraph Structure

Estephan Dazzi (IME-USP), Teofilo de Campos (UnB), Adrian Hilton (University of Surrey), Roberto Cesar Jr. (IME-USP)

TS12.2 - An Efficient Global Point Cloud Descriptor for Object Recognition and Pose Estimation
João Paulo Lima (UFRPE), Veronica Teichrieb (UFPE)

TS12.3 - Complexity-Aware Assignment of Latent Values in Discriminative Models for Accurate Gesture Recognition
Manoel Ribeiro (UFMG), Bruno Teixeira (UFMG), Antonio Otávio Fernandes (UFMG), Wagner Meira Jr. (UFMG), Erickson Nascimento (UFMG)

TS12.4 - A new Approach for Dynamic Gesture Recognition using Skeleton Trajectory Representation and Histograms of Cumulative Magnitudes
Edwin Escobedo Cardenas (UFOP), Guillermo Camara-Chavez (UFOP)

TSP – Poster Presentations

Friday (Oct, 7)

16:15 – 18:00

Chair: Leandro A. F. Fernandes (UFF)

TSP.1 - Puppeteering 2.5D Models
João Coutinho (UFABC), Bruno Augusto Dorta Marques (UFF), Joao Paulo Gois (UFABC)

TSP.2 - On the use of Calibration for Pedestrian Detection in On-board Vehicular Cameras
Gustavo Führ (INF-UFRGS), Maurício de Paula (UFPEl), Claudio Jung (INF-UFRGS)

TSP.3 - A Genetically Programmable Hybrid Virtual Reconfigurable Architecture for Image Filtering Applications
Manoel de Almeida (UFSCar), Emerson Pedrino (UFSCar), Maria Nicoletti (UFSCar & FACCAMP)

TSP.4 - Gameplay Genre Video Classification by Using Mid-level Video Representation
Renato Souza (PUC-Minas), Raquel Almeida (PUC-Minas), Arghir-Nicolae Moldovan (National College of Ireland), Zenilton Patrocínio Jr. (PUC-Minas), Silvio Guimaraes (PUC-Minas)

TSP.5 - Bag of Genres for Video Retrieval
Leonardo Assuane Duarte (UNIFESP), Otávio A. B. Penatti (SAMSUNG Research), Jurandy Almeida (UNIFESP)

TSP.6 - Stochastic Hierarchical Watershed Cut based on Disturbed Topographical Surface
Carlos Alberto Pimentel (PUC-Minas), Arnaldo de Albuquerque Araujo (UFMG), Jean Cousty (Université Paris-Est), Silvio Guimarães (PUC-Minas), Laurent Najman (Université Paris-Est)

TSP.7 - A Max-tree Simplification Proposal and Applications for the Interactive Max-tree Visualization Tool
Luis Tavares (IFSULDEMINAS & FEEC-UNICAMP), Roberto Souza (FEEC-UNICAMP), Leticia Rittner (FEEC-UNICAMP), Rubens Machado (CTI), Roberto Lotufo (FEEC-UNICAMP)

TSP.8 - Deep Learning-aided Parkinson's Disease Diagnosis from Handwritten Dynamics
Clayton Pereira (UFSCar), Silke Weber (UNESP-Botucatu), Christian Hook (Ostbayerische Tech. Hochschule), Gustavo Rosa (UNESP-Bauru), João Papa (UNESP-Bauru)

TSP.9 - Geometrical Approaches for Facial Expression Recognition using Support Vector Machines

Jovan Fernandes Junior (UFS), Maria Aragão (UFS), Leonardo Matos (UFS)

TSP.10 - Texture Analysis using Informed Search in Graphs

Romulo Frutuoso (UFC), Joao Paulo Gomes (UFC), Emanuele Santos (UFC), Joaquim Cavalcante-Neto (UFC), Creto Vidal (UFC)

TSP.11 - A Meta-learning Approach for Recommendation of Image Segmentation Algorithms

Gabriel Campos (UEL), Rafael Mantovani (ICMC-USP), Sylvio Barbon Jr. (UEL)

TSP.12 - An Evaluation of the Volume on Surface (VoS) Approach

Rafael Santos (UNESP-Presidente Prudente), Danilo Eler (UNESP-Presidente Prudente), Rogério Eduardo Garcia (UNESP-Presidente Prudente), Ronaldo Celso Correia (UNESP-Presidente Prudente)

TSP.13 - Using the Scene to Calibrate the Camera

Tiago Trocoli (UFBA), Luciano Oliveira (UFBA)

TSP.14 - Decreasing the Number of Features for Improving Human Action Classification

Kleber Souza (UFMG), Arnaldo de Albuquerque Araújo (UFMG), Zenilton Patrocínio Jr. (PUC-Minas), Jean Cousty (Université Paris-Est), Laurent Najman (Université Paris-Est), Yukiko Kenmochi (Université Paris-Est), Silvio Guimarães (PUC-Minas)