



MICCAI 2007 Accepted Papers

Last updated: Monday, 27 August 2007 10:42:56 AM

* Indicates papers which have been selected for podium presentation during an oral plenary session. All other papers have been selected for poster presentation.

101 Automatic Segmentation of Articular Cartilage in Magnetic Resonance Images of the Knee

Jurgen Fripp BioMedIA Lab, e-Health Research Centre, CSIRO ICT Centre, Australia.
Stuart Crozier School of ITEE, University of Queensland, Australia.
Simon K. Warfield Computational Radiology Laboratory, Harvard Medical School & Children's Hospital Boston, USA
Sebastien Ourselin BioMedIA Lab, e-Health Research Centre, CSIRO ICT Centre, Australia.

105 Integrating Functional and Structural Images for Simultaneous Cardiac Segmentation and Deformation Recovery

Ken C. L. Wong Hong Kong University of Science and Technology (HKUST)
Linwei Wang Hong Kong University of Science and Technology (HKUST)
Heye Zhang Hong Kong University of Science and Technology (HKUST)
Huafeng Liu Zhejiang University
Pengcheng Shi Hong Kong University of Science and Technology (HKUST)

106 Tract-Based Morphometry

Lauren J. O'Donnell Department of Neurosurgery, Brigham and Women's Hospital, Harvard Medical School
Carl-Fredrik Westin Lab for Mathematics in Imaging, Department of Radiology, Brigham and Women's Hospital, Harvard Medical School
Alexandra J. Golby Department of Neurosurgery, Brigham and Women's Hospital, Harvard Medical School

112 Using Statistical Shape Analysis for the Determination of Uterine Deformation States during Hydrometra

Matthias Harders ETH Zurich
Gabor Szekely ETH Zurich

116 Sources of Variability in MEG Data

Wanmei Ou Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology
Polina Golland Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology
Matti Hamalainen Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital

128* Inter-Subject Modelling of Liver Deformation during Radiation Therapy

Martin von Siebenthal ETH Zurich
Gábor Székely ETH Zurich
Antony Lomax Paul Scherrer Institute, Villigen
Philippe Cattin ETH Zurich

132 Dynamic MRI Scan Plane Control for Passive Tracking of Instruments and Devices

Simon DiMaio Surgical Planning Laboratory, Brigham and Women's Hospital, Harvard Medical School
Eigil Samset University of Oslo, Norway; & Surgical Planning Laboratory, Brigham and Women's Hospital, Harvard Medical School
Gregory Fischer Center for Integrated Surgical Systems Technology, Johns Hopkins University
Iulian Iordachita Center for Integrated Surgical Systems Technology, Johns Hopkins University
Gabor Fichtinger Center for Integrated Surgical Systems Technology, Johns Hopkins University
Ferenc Jolesz Surgical Planning Laboratory, Brigham and Women's Hospital, Harvard Medical School
Clare Tempany Surgical Planning Laboratory, Brigham and Women's Hospital, Harvard Medical School

133 Improved Statistical TRE Model when using a Reference Frame

Andrew Wiles Imaging Research Laboratories, Robarts Research Institute, Dept. of Medical Biophysics, The University of Western Ontario
Terry Peters Imaging Research Laboratories, Robarts Research Institute \ Dept. of Medical Biophysics, The University of Western Ontario

134 Robust Computation of Mutual Information using Spatially Adaptive Meshes

Hari Sundar University of Pennsylvania, Siemens Corporate Research
Dinggang Shen University of Pennsylvania
George Biros University of Pennsylvania
Chenyang Xu Siemens Corporate Research
Christos Davatzikos University of Pennsylvania

142 Statistical Shape Modeling using MDL Incorporating Shape, Appearance, and Expert Knowledge

Aaron Ward Simon Fraser University
Ghassan Hamarneh Simon Fraser University

144 Is a Single Energy Functional Sufficient? Adaptive Energy Functionals and Automatic Initialization

Chris McIntosh Medical Image Analysis Lab, School of Computing Science, Simon Fraser University
Ghassan Hamarneh Medical Image Analysis Lab, School of Computing Science, Simon Fraser University

- 145 Interactive Contacts Resolution Using Smooth Surface Representation**
- | | |
|-----------------|--|
| J r mie Dequidt | SimGroup, CIMIT/MGH |
| Julien Lenoir | LIFL - IRCICA/INRIA Alcove |
| St phane Cotin | Harvard Medical School \ SimGroup, CIMIT/MGH |
- 149 Cutting Tool System to Minimize Soft Tissue Damage for Robot-assisted Minimally Invasive Orthopedic Surgery**
- | | |
|--------------------|--|
| Naohiko Sugita | School of Eng.,The University of Tokyo |
| Yoshikazu Nakajima | School of Eng.,The University of Tokyo |
| Mamoru Mitsuishi | School of Eng.,The University of Tokyo |
| Shosaku Kawata | NAKANISHI INC |
| Kazuo Fujiwara | School of Medicine and Density, Okayama University |
| Nobuhiro Abe | School of Medicine and Density, Okayama University |
| Toshifumi Ozaki | School of Medicine and Density, Okayama University |
| Masahiko Suzuki | School of Medicine, Chiba University |
- 151 Unsupervised Reconstruction of A Patient-specific Surface Model of A Proximal Femur from Calibrated Fluoroscopic Images**
- | | |
|---------------------------------|--------------------|
| Guoyan Zheng | University of Bern |
| Xiao Dong | University of Bern |
| Miguel Angel Gonzalez Ballester | University of Bern |
- 153 Attenuation resilient AIF estimation based on hierarchical Bayesian modelling for first pass myocardial perfusion MRI**
- | | |
|------------------|---|
| Volker Schmid | Institute of Biomedical Engineering, Imperial College London, United Kingdom |
| Peter Gatehouse | Cardiovascular Magnetic Resonance Unit, Royal Brompton Hospital, London, United Kingdom |
| Yang Guang-Zhong | Institute of Biomedical Engineering, Imperial College London, United Kingdom |
- 156 Hyperspherical von Mises-Fisher (HvMF) Mixture Modelling of High Angular Resolution Diffusion MRI**
- | | |
|---------------------|--|
| Abhir Bhalerao | Department of Computer Science, University of Warwick |
| Carl-Fredrik Westin | Laboratory of Mathematics in Imaging, Harvard Medical School |
- 157 Coronary Artery Segmentation and Skeletonization based on Competing Fuzzy Connectedness Tree**
- | | |
|----------------|--|
| Chunliang Wang | Center of Medical Image Science and Visualization (CMIV), Link ping University, Link ping, Sweden |
|  rjan Smedby | Center of Medical Image Science and Visualization (CMIV) \ Dept. of Radiology, Link ping University, Link ping, Sweden |
- 167 Active-Contour-Based Image Segmentation using Machine Learning Techniques**

Patrick Etyngier	Ecole des Ponts - Certis
Florent Segonne	Ecole des Ponts - Certis
Renaud Keriven	Ecole des Ponts - Certis

168 Automatic Dry Eye Detection

Tamir Yedidya	Australian National University
Richard Hartley	Australian National University
Jean-Pierre Guillon	Lions Eye Institute, University of Western Australia
Yogesana Kanagasingham	Lions Eye Institute, University of Western Australia

170 3-D Analysis of Cortical Morphometry in Differential Diagnosis of Parkinson's Plus Syndromes: Mapping Frontal Lobe Cortical Atrophy in Progressive Supranuclear Palsy Patients

Duygu Tosun	Laboratory of Neuro Imaging, University of California, Los Angeles
Simon Duchesne	Univ. de Rennes I (France)
Yan Rolland	Ctr. Hospitalier Univ. de Rennes (France)
Arthur Toga	Laboratory of Neuro Imaging, University of California, Los Angeles
Marc Verin	Ctr. Hospitalier Univ. de Rennes (France)
Christian Barillot	Univ. de Rennes I (France)

173* Finsler Tractography for White Matter Connectivity Analysis of the Cingulum Bundle

John Melonakos	School of ECE, Georgia Institute of Technology
Vandana Mohan	School of ECE, Georgia Institute of Technology
Marc Niethammer	Psychiatry Neuroimaging Laboratory, Harvard Medical School
Kate Smith	Psychiatry Neuroimaging Laboratory, Harvard Medical School
Marek Kubicki	Psychiatry Neuroimaging Laboratory, Harvard Medical School
Allen Tannenbaum	School of ECE, Georgia Institute of Technology

177* Real-time MR Diffusion Tensor and Q-ball imaging using Kalman filtering

Cyril Poupon	CEA NeuroSpin, Institut Fédératif de Recherche 49
Fabrice Poupon	CEA NeuroSpin, Institut Fédératif de Recherche 49
Alexis Roche	CEA NeuroSpin, Institut Fédératif de Recherche 49
Yann Cointepas	CEA NeuroSpin, Institut Fédératif de Recherche 49
Jessica Dubois	Faculté de médecine, Université de Genève
Jean-Francois Mangin	CEA NeuroSpin, Institut Fédératif de Recherche 49

193* Localized Shape Variations for Classifying Wall Motion in Echocardiograms

K. Y. Esther Leung	Biomedical Engineering, Erasmus MC Rotterdam, the Netherlands
Johan G. Bosch	Biomedical Engineering, Erasmus MC Rotterdam, the Netherlands

195* Modelling Intravasation of Liquid Distension Media in Surgical Simulators

Stefan Tuchschnid	ETH Zurich
Michael Bajka	University Hospital Zurich
Dominik Szczerba	ETH Zurich
Bryn Lloyd	ETH Zurich
Gabor Székely	ETH Zurich
Matthias Harders	ETH Zurich

202* In-utero Three Dimension High Resolution Fetal Brain Diffusion Tensor Imaging

Shuzhou Jiang	Imperial College London
Hui Xue	Imperial College London
Serena Counsell	Imperial College London
Mustafa Anjari	Imperial College London
Joanna Allsop	Imperial College London
Mary Rutherford	Imperial College London
Daniel Rueckert	Imperial College London
Joseph Hajnal	Imperial College London

204 LOCUS: Local Cooperative Unified Segmentation of MRI Brain Scans

Benoit Scherrer	INSERM U836-UJF-CEA-CHU (GIN), LIG CNRS UMR 5217 (MAGMA),
Michel Dojat	INSERM U836-UJF-CEA-CHU (GIN)
Florence Forbes	INRIA, LJK, Université de Grenoble (MISTIS)
Catherine Garbay	LIG CNRS UMR 5217 (MAGMA)

212 Real-Time SPECT and 2D Ultrasound Image Registration

Marek Bucki	TIMC-IMAG, UJF, Université Joseph Fourier
Fabrice Chassat	CMM, Universidad de Chile
Francisco Galdames	DIE, Universidad de Chile
Takeshi Asahi	CMM, Universidad de Chile
Daniel Pizarro	CMM, Universidad de Chile
Gabriel Lobo	Nuclear Medicine Service, Hospital San Juan de Dios, Santiago, Chile

218 Robotic Assistant for Transperineal Prostate Interventions in 3T Closed MRI

Gregory Fischer	Johns Hopkins University (CISST ERC)
Simon DiMaio	Harvard University (SPL)
Iulian Iordachita	Johns Hopkins University (CISST ERC)
Gabor Fichtinger	Johns Hopkins University (CISST ERC)

222 Revisiting the Evaluation of Segmentation Results: Introducing Confidence Maps

Christophe Restif	Oxford Brookes University
-------------------	---------------------------

225 Fully Automatic Segmentation of the Hippocampus and the Amygdala from MRI Using Hybrid Prior Knowledge

Marie Chupin	Department of Clinical and Experimental Epilepsy, Institute of Neurology, University College London
Alexander Hammers	Imperial College London
Eric Bardinet	Cognitive Neuroscience and Brain Imaging Laboratory, CNRS UPR640
Olivier Colliot	Cognitive Neuroscience and Brain Imaging Laboratory, CNRS UPR640
Rebecca Liu	National Hospital for Neurology and Neurosurgery, University College London Hospital, NHS trust
John Duncan	Department of Clinical and Experimental Epilepsy, Institute of Neurology, University College London
Line Garnerø	Cognitive Neuroscience and Brain Imaging Laboratory, CNRS UPR640
Louis Lemieux	Department of Clinical and Experimental Epilepsy, Institute of Neurology, University College London

228 Precision targeting of liver lesions with a needle-based soft tissue navigation system

Lena Maier-Hein	German Cancer Research Center, Division of Medical and Biological Informatics
Frank Pianka	University of Heidelberg, Department of General, Abdominal and Transplant Surgery
Alexander Seitel	German Cancer Research Center, Division of Medical and Biological Informatics
Sascha A. Müller	University of Heidelberg, Department of General, Abdominal and Transplant Surgery
Aysun Tekbas	University of Heidelberg, Department of General, Abdominal and Transplant Surgery
Mathias Seitel	German Cancer Research Center, Division of Medical and Biological Informatics
Ivo Wolf	German Cancer Research Center, Division of Medical and Biological Informatics
Bruno M. Schmied	University of Heidelberg, Department of General, Abdominal and Transplant Surgery
Hans-Peter Meinzer	German Cancer Research Center, Division of Medical and Biological Informatics

229* A Clinically Motivated 2-Fold Framework for Quantifying and Classifying Immunohistochemically Stained Specimens

Bonnie Hall	Center for Biomedical Imaging and Informatics, Graduate School of the Biomedical Sciences, The Cancer Institute of New Jersey, UMDNJ-Robert Wood Johnson Medical School
Wenjin Chen	Center for Biomedical Imaging and Informatics, The Cancer Institute of New Jersey, UMDNJ-Robert Wood Johnson Medical School
Michael Reiss	Dept. Of Internal Medicine and Dept. of Molecular Genetics, Microbiology, and Immunology, The Cancer Institute of New Jersey, UMDNJ-Robert Wood Johnson Medical School
David Foran	Center for Biomedical Imaging and Informatics, The Cancer Institute of New Jersey, UMDNJ-Robert Wood Johnson Medical School

231 Global Medical Shape Analysis Using the Laplace-Beltrami Spectrum

Marc Niethammer	Brigham and Women's Hospital
Martin Reuter	MIT
Franz-Erich Wolter	Leibniz University of Hannover
Sylvain Bouix	Brigham and Women's Hospital
Niklas Peinecke	Leibniz University of Hannover
Min-Seong Koo	Kwandong University
Martha Shenton	Brigham and Women's Hospital

233 How Do Registration Parameters Affect Quantitation of Lung Kinematics?

Tessa Sundaram	University of Pennsylvania, Philadelphia, PA, USA
Nicholas Tustison	University of Pennsylvania, Philadelphia, PA, USA
Jurgen Biederer	University Hospital Schleswig-Holstein, Campus Kiel, Germany
Ralf Tetzlaff	German Cancer Research Center, Heidelberg, Germany
James Gee	University of Pennsylvania, Philadelphia, PA, USA

234 Segmentation and Classification of Breast Tumor Using Dynamic Contrast-Enhanced MR Images

Yuanjie Zheng	Department of Radiology, University of Pennsylvania
Sajjad Baloch	Department of Radiology, University of Pennsylvania
Sarah Englander	Department of Radiology, University of Pennsylvania
Mitchell Schnall	Department of Radiology, University of Pennsylvania
Dinggang Shen	Department of Radiology, University of Pennsylvania

235 Subject-specific biomechanical simulation of brain indentation using a meshless method

Ashley Horton	The University of Western Australia, UWA
Adam Wittek	The University of Western Australia, UWA
Karol Miller	The University of Western Australia, UWA

244 Probabilistic speckle decorrelation for 3D ultrasound

Catherine Laporte	McGill University
Tal Arbel	McGill University

248 Online Estimation of the Target Registration Error for n-ocular Optical Tracking Systems

Tobias Sielhorst	Technische Universität München, Chair for Computer Aided Medical Procedures
Martin Bauer	Technische Universität München, Chair for Computer Aided Medical Procedures
Oliver Wenisch	Advanced Realtime Tracking GmbH
Gudrun Klinker	Technische Universität München, Chair for Computer Aided Medical Procedures
Nassir Navab	Technische Universität München, Chair for Computer Aided Medical Procedures

251 Endoscopic Navigation for Minimally Invasive Suturing

Christian Wengert	Computer Vision Laboratory ETH Zurich
Lukas Bossard	Computer Vision Laboratory ETH Zurich
Armin Häberling	Computer Vision Laboratory ETH Zurich
Charles Baur	Virtual Reality and Active Interfaces Group, Ecole Polytechnique Federale de Lausanne EPFL
Gábor Székely	Computer Vision Laboratory ETH Zurich
Philippe Cattin	Computer Vision Laboratory ETH Zurich

252 LV motion tracking from 3D echocardiography using textural and structural information.

Andriy Myronenko	OGI School of Science and Engineering, Oregon Health and Science University.
Xubo Song	OGI School of Science and Engineering, Oregon Health and Science University.
David Sahn	Diagnostic Radiology, and Obstetrics and Gynecology , Oregon Health and Sciences University

257 Boundary-Specific Cost Functions for Quantitative Airway Analysis

Atila Kiraly	Siemens Corporate Research
Benjamin Odry	Siemens Corporate Research
David Naidich	New York University Medical Center, Dept. of Radiology
Carol Novak	Siemens Corporate Research

264 Shape-Based Myocardial Contractility Analysis using Multivariate Outlier Detection

Karim Lekadir	Imperial College London
Niall Keenan	Royal Brompton Hospital, London
Dudley Pennell	Royal Brompton Hospital, London
Guang-Zhong Yang	Imperial College London

268 A Training System for Ultrasound-Guided Needle Insertion Procedures

Yanong Zhu	School of Computing, University of Leeds
Derek Magee	School of Computing, University of Leeds
Rish Ratnalingam	Mid Yorkshire Hospitals NHS Trust
David Kessel	Leeds Teaching Hospitals NHS Trust

270 Phase sensitive reconstruction for water/fat separation in MR imaging using inverse gradient

Joakim Rydell	Linköping University
Hans Knutsson	Linköping University
Johanna Pettersson	Linköping University
Andreas Johansson	Linköping University
Gunnar Farneback	Linköping University
Olof Dahlqvist	Linköping University
Peter Lundberg	Linköping University
Fredrik Nyström	Linköping University
Magnus Borga	Linköping University

271 Nonlinear Registration of Diffusion MR Images Based on Fiber Bundles

Ulas Ziyen MIT Computer Science and Artificial Intelligence Lab, Cambridge MA, USA
Mert Rory Sabuncu MIT Computer Science and Artificial Intelligence Lab, Cambridge MA, USA
Lauren J. O'Donnell Department of Neurosurgery, Brigham and Women's Hospital, Harvard Medical School, Boston MA, USA \ Laboratory of Mathematics in Imaging, Brigham and Women's Hospital
Carl Fredrik Westin Laboratory of Mathematics in Imaging, Brigham and Women's Hospital

272 Improving Temporal Fidelity in k-t BLAST MRI Reconstruction

Andreas Sigfridsson Division of Clinical Physiology, Department of Medicine and Care, Linkoping University, Linkoping, Sweden, Department of Biomedical Engineering, Linkoping University, Linkoping, Sweden, Center for Medical Image Science and Visualization, Linkoping University, Linkoping, Sweden
Mats Andersson Department of Biomedical Engineering \ Center for Medical Image Science and Visualization, Linkoping University, Linkoping, Sweden
Lars Wigstrom Division of Clinical Physiology, Department of Medicine and Care, Linkoping University, Linkoping, Sweden \ Center for Medical Image Science and Visualization, Linkoping University, Linkoping, Sweden
John-Peder Escobar Kvitting Division of Clinical Physiology, Department of Medicine and Care, Linkoping University, Linkoping, Sweden \ Center for Medical Image Science and Visualization, Linkoping University, Linkoping, Sweden
Hans Knutsson Department of Biomedical Engineering, Linkoping University, Linkoping, Sweden \ Center for Medical Image Science and Visualization, Linkoping University, Linkoping, Sweden

283* A Boosted Segmentation Method for Surgical Workflow Analysis

Nicolas Padoy Chair for Computer Aided Medical Procedures (CAMP), TU Munich, Germany - LORIA-INRIA Lorraine, Nancy, France
Tobias Blum Chair for Computer Aided Medical Procedures (CAMP), TU Munich, Germany
Irfan Essa College of Computing, Georgia Institute of Technology, Atlanta, USA
Hubertus Feussner Chirurgische Klinik und Poliklinik, Klinikum Rechts der Isar, TU Munich, Germany
Marie-Odile Berger LORIA-INRIA Lorraine, Nancy, France
Nassir Navab Chair for Computer Aided Medical Procedures (CAMP), TU Munich, Germany

285 Stabilization of Image Motion for Robotic Assisted Beating Heart Surgery

Danail Stoyanov Imperial College London
Guang-Zhong Yang Imperial College London

287 Contraction detection in Small Bowel from an Image Sequence of Wireless Capsule Endoscopy

Hai Vu	ISIR, Osaka University
Tomio Echigo	Osaka Electro-Communication University
Ryusuke Sagawa	ISIR, Osaka University
Keiko Yagi	Kobe Pharmaceutical University
Masatsugu Shiba	Osaka City University Graduate School of Medicine
Kazuhide Higuchi	Osaka City University Graduate School of Medicine
Tetsuo Arakawa	Osaka City University Graduate School of Medicine
Yasushi Yagi	ISIR, Osaka University

291 High Throughput Analysis of Breast Cancer Specimens on the Grid

Lin Yang	ECE, Rutgers University CBII, UMDNJ
Wenjin Chen	Cancer Institute of NJ \ CBII, UMDNJ
Peter Meer	ECE, Rutgers University
Gratian Salaru	Cancer Institute of NJ \ CBII, UMDNJ
Michael Feldman	Dept. of Surgical Pathology, UPENN
David J. Foran	Cancer Institute of NJ CBII, UMDNJ

292 Real-time Tracking of the Left Ventricle in 3D Echocardiography Using a State Estimation Approach

Fredrik Orderud	Norwegian University of Science and Technology, Norway
Jøger Hansgård	University of Oslo, Norway
Stein Inge Rabben	GE Vingmed Ultrasound, Norway

300* Modeling of Needle-Tissue Interaction using Ultrasound-based Motion Estimation

Ehsan Dehghan	Electrical Engineering Department, University of British Columbia, Vancouver, BC, Canada
Xu Wen	Electrical Engineering Department, University of British Columbia, Vancouver, BC, Canada
Reza Zahiri-Azar	Electrical Engineering Department, University of British Columbia, Vancouver, BC, Canada
Maud Marchal	Electrical Engineering Department, University of British Columbia, Vancouver, BC, Canada \ TIMC-GMCAO Laboratory, Grenoble, France
Septimiu E. Salcudean	Electrical Engineering Department, University of British Columbia, Vancouver, BC, Canada

302 Efficient Selection of the Most Similar Image in a Database for Critical Structures Segmentation

Olivier Commowick	INRIA Sophia Antipolis DOSIsoft S.A
Grégoire Malandain	INRIA Sophia Antipolis

306* Measuring Brain Variability via Sulcal Lines Registration: a Diffeomorphic Approach

Stanley Durrleman	INRIA Sophia Antipolis
Xavier Pennec	INRIA Sophia Antipolis
Alain Trouvé	CMLA, ENS Cachan
Nicholas Ayache	INRIA Sophia Antipolis

- 311 Application of Open Source Image Guided Therapy Software in MR-guided Therapies**
- | | |
|--------------------|---|
| Nobuhiko Hata | Brigham and Women's Hospital and Harvard Medical School |
| Steve Pieper | Brigham and Women's Hospital and Harvard Medical School |
| Ferenc Jolesz | Brigham and Women's Hospital and Harvard Medical School |
| Clare Tempny | Brigham and Women's Hospital and Harvard Medical School |
| Peter Black | Brigham and Women's Hospital and Harvard Medical School |
| Shigehiro Morikawa | Shiga Medical University |
| Hiroshi Iseki | Tokyo Women's Medical University |
| Makoto Hashizume | Kyusyu University |
| Ron Kikinis | Brigham and Women's Hospital \ and Harvard Medical School |
- 314 One-Class Acoustic Characterization Applied to Blood Detection in IVUS**
- | | |
|--------------------|---|
| Sean O'Malley | University of Houston (UH) |
| Morteza Naghavi | Association for Eradication of Heart Attack |
| Ioannis Kakadiaris | University of Houston (UH) |
- 315 Towards 3D Ultrasound Image Based Soft Tissue Tracking: a Transrectal Ultrasound Prostate Image Alignment System**
- | | |
|------------------|---|
| Michael Baumann | Joseph Fourier University, TIMC laboratory, GMCAO department, Grenoble AND Koelis SAS, Grenoble |
| Pierre Mozer | Hospital St Pitié la Salpêtrière, Paris |
| Vincent Daanen | Koelis SAS, Grenoble |
| Jocelyne Troccaz | Joseph Fourier University, TIMC laboratory, GMCAO department, Grenoble |
- 318 Live-Vessel: Extending Livewire for Simultaneous Extraction of Optimal Medial and Boundary Paths in Vascular Images**
- | | |
|--------------------|--------------------------------|
| Kelvin Poon | University of British Columbia |
| Ghassan Hamarneh | Simon Fraser University |
| Rafeef Abugharbieh | University of British Columbia |
- 329 Non-Rigid Image Registration using Graph-Cuts**
- | | |
|--------------------|--|
| Tommy W. H. Tang | The Hong Kong University of Science and Technology |
| Albert C. S. Chung | The Hong Kong University of Science and Technology |
- 332 3D/2D Image Registration: The Impact of X-Ray Views and Their Number**
- | | |
|-----------------|--|
| Dejan Tomazevic | University of Ljubljana, Faculty of Electrical Engineering |
| Bostjan Likar | University of Ljubljana, Faculty of Electrical Engineering |
| Franjo Pernus | University of Ljubljana, Faculty of Electrical Engineering |
- 334 Segmentation of Q-Ball Images Using Statistical Surface Evolution**

Maxime Descoteaux Projet Odyssee, INRIA Sophia Antipolis

Rachid Deriche Projet Odyssee, INRIA Sophia Antipolis

336 Quantifying Heterogeneity in Dynamic Contrast-Enhanced MRI Parameter Maps

Chris Rose Imaging Science and Biomedical Engineering, University of Manchester, UK

Sam Mills Imaging Science and Biomedical Engineering, University of Manchester, UK

James O'Connor Imaging Science and Biomedical Engineering, University of Manchester, UK

Gio Buonaccorsi Imaging Science and Biomedical Engineering, University of Manchester, UK

Caleb Roberts Imaging Science and Biomedical Engineering, University of Manchester, UK

Yvon Watson Imaging Science and Biomedical Engineering, University of Manchester, UK

Brandon Whitcher Clinical Imaging Centre, GlaxoSmithKline, London, UK

Gordon Jayson Cancer Research UK Department of Medical Oncology, Christie Hospital NHS Trust, Manchester, UK

Alan Jackson Imaging Science and Biomedical Engineering, University of Manchester, UK

Geoff Parker Imaging Science and Biomedical Engineering, University of Manchester, UK

341* Quantification of measurement error in DTI: Theoretical predictions and validation

Casey Goodlett University of North Carolina, Chapel Hill

P. Thomas Fletcher University of Utah

Weili Lin University of North Carolina, Chapel Hill

Guido Gerig University of North Carolina, Chapel Hill

342* Functional Near Infrared Spectroscopy in Novice and Expert Surgeons – a Manifold Embedding Approach

Daniel Leff Imperial College London

Felipe Orihuela-Espina Imperial College London

Louis Atallah Imperial College London

Ara Darzi Imperial College London

Guang-Zhong Yang Imperial College London

353 Regional homogeneity and anatomical parcellation for fMRI image classification: application to schizophrenia and normal controls

Feng Shi	National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing 100080, China
Yong Liu	National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing 100080, China
Tianzi Jiang	National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing 100080, China
Yuan Zhou	National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing 100080, China
Wanlin Zhu	National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing 100080, China
Jiefeng Jiang	National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences, Beijing 100080, China
Haihong Liu	Institute of Mental Health, Second Xiangya Hospital, Central South University, Changsha 410011, Hunan, China.
Zhening Liu	Institute of Mental Health, Second Xiangya Hospital, Central South University, Changsha 410011, Hunan, China.

355 Alignment of Large Image Series using Cubic B-splines Tessalation: Application to Transmission Electron Microscopy Data.

Julien Dauguet	Harvard Medical School
Davi Bock	Harvard Medical School
R. Clay Reid	Harvard Medical School
Simon K. Warfield	Harvard Medical School

361 Robust Kernel Methods for Sparse MR Image Reconstruction

Joshua Trzasko	Department of Physiology and Biomedical Engineering, Mayo Clinic College of Medicine
Armando Manduca	Department of Physiology and Biomedical Engineering, Mayo Clinic College of Medicine
Eric Borisch	Magnetic Resonance Research Lab, Mayo Clinic College of Medicine

362 Characterizing Task-Related Temporal Dynamics of Spatial Activation Distributions in fMRI BOLD Signals

Bernard Ng	University of British Columbia (UBC)
Rafeef Abugharbieh	University of British Columbia (UBC)
Samantha Palmer	University of British Columbia (UBC)
Martin McKeown	University of British Columbia (UBC)

364 Real-time Tissue Tracking with B-Mode Ultrasound Using Speckle and Visual Servoing

Alexandre Krupa	IRISA - INRIA (The french national institute for research in computer science and control)
Gabor Fichtinger	Engineering Reseach Center, Johns Hopkins University, Baltimore, USA
Gregory D. Hager	Engineering Reseach Center, Johns Hopkins University, Baltimore, USA

366 Tagged Volume Rendering of the Heart

Daniel Mueller	Queensland University of Technology, Australia
Anthony Maeder	e-Health Research Centre, CSIRO, Australia
Peter O'Shea	Queensland University of Technology, Australia

369* Towards Tracking Breast Cancer Across Medical Images Using Subject-Specific Biomechanical Models

Vijay Rajagopal	Bioengineering Institute, University of Auckland, NZ
Angela Lee	Bioengineering Institute, University of Auckland, NZ
Jae-Hoon Chung	Bioengineering Institute, University of Auckland, NZ
Ruth Warren	Department of Radiology, Addenbrooke's Hospital, Cambridge, UK
Ralph Highnam	Highnam Associates Limited, NZ
Poul M.F. Nielsen	Bioengineering Institute, University of Auckland, NZ
Martyn P. Nash	Bioengineering Institute, University of Auckland, NZ

373 Cardiac-Motion Compensated MR Imaging and Strain Analysis of Ventricular Trabeculae

Andrew Dowsey	Institute of Biomedical Engineering, Imperial College London
Jenny Keegan	National Heart and Lung Institute, Imperial College London Royal Brompton and Harefield NHS Trust
Guang-Zhong Yang	Institute of Biomedical Engineering Imperial College London

379 Segmentation-driven 2D-3D Registration for Abdominal Catheter Interventions

Martin Groher	Chair for Computer Aided Medical Procedures (CAMP), Technische Universität München
Frederik Bender	Chair for Computer Aided Medical Procedures (CAMP), Technische Universität München
Ralf-Thorsten Hoffmann	Institute for Clinical Radiology, University of Munich, Grosshadern Hospital
Nassir Navab	Chair for Computer Aided Medical Procedures (CAMP), Technische Universität München

382 Orthopedics Surgery Trainer with PPU-accelerated Blood and Tissue Simulation

Wai-Man Pang	The Department of Computer Science and Engineering, The Chinese University of Hong Kong
Jing Qin	The Department of Computer Science and Engineering, The Chinese University of Hong Kong
Yim-Pan Chui	The Department of Computer Science and Engineering The Chinese University of Hong Kong
Tien-Tsin Wong	The Department of Computer Science and Engineering, The Chinese University of Hong Kong
Kwok-Sui Leung	Department of Orthopaedics and Traumatology, CUHK
Pheng-Ann Heng	The Department of Computer Science and Engineering, The Chinese University of Hong Kong; Shenzhen Institute of Advanced Integration Technology, Chinese Academy of Science/CUHK

385 Combinatorial optimization for electrode labeling of EEG caps

Mickael Pechaud	Ecole Normale Superieure
Renaud Keriven	Ecole des Ponts
Theodore Papadopoulo	INRIA
Badier Jean-Michel	INSERM

387 Methods for Inverting Dense Displacement Fields: Evaluation in Brain Image Registration

William Crum	University College London
Oscar Camara	University College London
David Hawkes	University College London

398 PCA-Based Magnetic Field Modeling : Application For On-Line Temperature Monitoring

Gregory Maclair	IMF LaBRI
Baudouin Denis de Senneville	IMF
Mario Ries	IMF
Bruno Quesson	IMF
Pascal Desbarats	LaBRI
Jenny Benois-Pineau	LaBRI
Chrit Moonen	IMF

405* Statistical and Topological Atlas based Brain Image Segmentation

Pierre-Louis Bazin	Johns Hopkins University
Dzung L. Pham	Johns Hopkins University

409 Automated Planning of Scan Geometries in Spine MRI Scans

Vladimir Pekar	Philips Medical Systems
Daniel Bystrov	Philips Research Europe - Hamburg
Harald Heese	Philips Research Europe - Hamburg
Sebastian Dries	Philips Research Europe - Hamburg
Stefan Schmidt	Philips Research Europe - Hamburg \ University of Mannheim
Ruediger Grewer	Philips Research Europe - Hamburg
Chiel den Harder	Philips Medical Systems
Rene Bergmans	Philips Medical Systems
Arjan Simonetti	Philips Medical Systems
Arianne van Muiswinkel	Philips Medical Systems

410 False Positive Reduction in Mammographic Mass Detection using Local Binary Patterns

Arnau Oliver Malagelada	University of Girona
Xavier Lladó Bardera	University of Girona
Jordi Freixenet Bosch	University of Girona
Joan Martí Bonmatí	University of Girona

- 411 Diffuse parenchymal lung diseases: 3D automated detection in MDCT**
- | | |
|--------------------------|--|
| Catalin Fetita | Institut National des Telecommunications (INT) |
| Kuang Che Chang
Chien | Institut National des Telecommunications (INT); National Chung Cheng
University, Taiwan |
| Pierre-Yves Brillet | Avicenne Hospital, Bobigny, France |
| Francoise Preteux | Institut National des Telecommunications (INT) |
| Philippe Grenier | Université Paris 6, Paris; Pitié-Salpêtrière Hospital, Paris, France |
- 416 Primal/Dual Linear Programming and Statistical Atlases for Cartilage Segmentation**
- | | |
|-------------------|---|
| Ben Glocker | Computer Aided Medical Procedures (CAMP), Technische Universität
München |
| Nikos Komodakis | GALEN Group, Laboratoire de Mathématiques Appliquées aux Systèmes,
Ecole Centrale de Paris |
| Nikos Paragios | GALEN Group, Laboratoire de Mathématiques Appliquées aux Systèmes,
Ecole Centrale de Paris |
| Christian Glaser | Department of Clinical Radiology, Ludwig-Maximilians-Universität
München |
| Georgios Tziritas | Computer Science Department, University of Crete |
| Nassir Navab | Computer Aided Medical Procedures (CAMP), Technische Universität
München |
- 418 Fuzzy Nonparametric DTI Segmentation for Robust Cingulum-Tract Extraction**
- | | |
|--------------|----------------------------|
| Suyash Awate | University of Pennsylvania |
| Hui Zhang | University of Pennsylvania |
| James Gee | University of Pennsylvania |
- 420* Detection of Spatial Activation Patterns As Unsupervised Segmentation of fMRI Data**
- | | |
|----------------|--------------------------------|
| Polina Golland | MIT |
| Yulia Golland | Hebrew University of Jerusalem |
| Rafael Malach | Weizmann Institute of Science |
- 422 Prior Knowledge Driven Multiscale Segmentation of Brain MRI**
- | | |
|------------------------|------------------------------|
| Ayelet Akselrod-Ballin | Weizmann Institute |
| Meirav Galun | Weizmann Institute |
| John Moshe Gomori | Hadassah University Hospital |
| Achi Brandt | Weizmann Institute |
| Ronen Basri | Weizmann Institute |
- 428* Effects of Registration Regularization and Atlas Sharpness on Segmentation Accuracy**

Boon Thye Yeo	Computer Science and Artificial Intelligence Lab, Massachusetts Institute of Technology
Mert Sabuncu	Computer Science and Artificial Intelligence Lab, Massachusetts Institute of Technology
Rahul Desikan	Department of Anatomy and Neurobiology, Boston University School of Medicine
Bruce Fischl	Martinos Center, Massachusetts General Hospital
Polina Golland	Computer Science and Artificial Intelligence Lab, Massachusetts Institute of Technology

429 Virtually Extended Surgical Drilling Device: Virtual Mirror for Navigated Spine Surgery

Christoph Bichlmeier	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
Sandro Michael Heining	Trauma Surgery Department, Klinikum Innenstadt, LMU, Munich, Germany
Mohammad Rustaee	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
Nassir Navab	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany

432 Towards Whole Brain Segmentation by A Hybrid Model

Zhuowen Tu	University of California, Los Angeles
Arthur Toga	University of California, Los Angeles

438 Use of Varying Constraints in Optimal 3-D Graph Search for Segmentation of Macular Optical Coherence Tomography Images

Mona Haeker	The University of Iowa
Michael Abramoff	The University of Iowa
Xiaodong Wu	The University of Iowa
Randy Kardon	The University of Iowa
Milan Sonka	The University of Iowa

442* Closed-loop control in fused MR-TRUS image-guided prostate biopsy

Sheng Xu	Philips Research North America
Jochen Kruecker	Philips Research North America
Peter Guion	National Institutes of Health
Neil Glossop	Traxtal Inc.
Ziv Neeman	National Institutes of Health
Peter Choyke	National Institutes of Health
Anurag Singh	National Institutes of Health
Bradford Wood	National Institutes of Health

449* Robotic Assistance for Ultrasound Guided Prostate Brachytherapy

Gabor Fichtinger	Johns Hopkins University
Jonathan Fiene	Johns Hopkins University
Christopher Kennedy	Johns Hopkins University
Gernot Kronreif	PROFACTOR Research and Solutions GmbH
Iulian Iordachita	Johns Hopkins University
Danny Song	Johns Hopkins University
Clif Burdette	Acoustic Medsystems
Peter Kazanzides	Johns Hopkins University

453 Simultaneous Segmentation, Kinetic Parameter Estimation, and Uncertainty Visualization of Dynamic PET Images

Ahmed Saad	Medical Image Analysis Lab, School of Computing Science, Simon Fraser University \ Graphics, Usability, and Visualization Lab, School of Computing Science, Simon Fraser University
Ben Smith	Medical Image Analysis Lab, School of Computing Science, Simon Fraser University \ Graphics, Usability, and Visualization Lab, School of Computing Science, Simon Fraser University
Ghassan Hamarneh	Medical Image Analysis Lab, School of Computing Science, Simon Fraser University
Torsten Moller	Graphics, Usability, and Visualization Lab, School of Computing Science, Simon Fraser University

454 SMT: Split & Merge Tractography for DT-MRI

Ugur Bozkaya	Bogazici University
Burak Acar	Bogazici University

459* Quantification of Blood Flow from Rotational Angiography

Irina Waechter	University College London
Joerg Bredno	Philips Research Aachen
Dean Barratt	University College London
Juergen Weese	Philips Research Aachen
David Hawkes	University College London

468* Real-time nonlinear finite element analysis for surgical simulation using graphics processing units

Zeike Taylor	University College London \ BioMedIA Lab, e-Health Research Centre, CSIRO ICT Centre, Australia.
Mario Cheng	BioMedIA Lab, e-Health Research Centre, CSIRO ICT Centre, Australia.
Sebastien Ourselin	BioMedIA Lab, e-Health Research Centre, CSIRO ICT Centre, Australia.

470* Non-parametric Diffeomorphic Image Registration with the Demons Algorithm

Tom Vercauteren	Asclepios research group, INRIA Sophia Antipolis \ Mauna Kea Technologies
Xavier Pennec	Asclepios research group, INRIA Sophia Antipolis
Aymeric Perchant	Mauna Kea Technologies
Nicholas Ayache	Asclepios research group, INRIA Sophia Antipolis

472 Improving the Contrast of Breast Cancer Masses in Ultrasound using an Autoregressive Model Based Filter

Etienne von Lavante University of Oxford, United Kingdom
J. Alison Noble University of Oxford, United Kingdom

478 A MR Compatible Mechatronic System to Facilitate Magic Angle Experiments in Vivo

Haytham Elhawary Imperial College London
Aleksandar Zivanovic Imperial College London
Marc Rea Imperial College London
Zion Tsz Ho Tse Imperial College London
Donald McRobbie Imperial College London
Ian Young Imperial College London
Michael Lamperth Imperial College London

482 Accuracy assessment of global and local atrophy measurement techniques with realistic longitudinal data

Oscar Camara University College London, UCL
Rachael Scahill University College London, UCL
Julia Schnabel University College London, UCL
William Crum University College London, UCL
Gerard Ridgway University College London, UCL
Derek Hill University College London, UCL
Nick Fox University College London, UCL

484* Thoracic CT-PET Registration Using a 3D Breathing Model

Antonio Moreno Ecole Normale Supérieure des Télécommunications, ENST, FRANCE
Sylvie Chambon Ecole Normale Supérieure des Télécommunications, ENST, FRANCE
Anand P. Santhanam University of Central Florida, UCF \ Department of Radiation Oncology, MD Anderson Cancer Center, USA
Roberta Brocardo Ecole Normale Supérieure des Télécommunications, ENST, FRANCE
Patrick Kupelian Department of Radiation Oncology, MD Anderson Cancer Center, USA
Jannick P. Rolland University of Central Florida, UCF, USA
Elsa Angelini Ecole Normale Supérieure des Télécommunications, ENST, FRANCE
Isabelle Bloch Ecole Normale Supérieure des Télécommunications, ENST, FRANCE

485 pq-space Based Non-Photorealistic Rendering for Augmented Reality

Mirna Lerotic Institute of Biomedical Engineering, Imperial College London
Adrian J. Chung Institute of Biomedical Engineering, Imperial College London
George P. Mylonas Institute of Biomedical Engineering, Imperial College London
Guang-Zhong Yang Institute of Biomedical Engineering, Imperial College London

492 Intra-operative 3D Guidance in Prostate Brachytherapy using a non-isocentric C-arm

Ameet Jain	Johns Hopkins University, Philips Research North America
Anton Deguet	Johns Hopkins University
Iulian Iordachita	Johns Hopkins University
Gouthami Chintalapani	Johns Hopkins University
Jack Blevins	Acoustic MedSystems, Inc.
Yi Le	Johns Hopkins University School of Medicine
Elwood Armour	Johns Hopkins University School of Medicine
Clif Burdette	Acoustic MedSystems, Inc.
Danny Song	Johns Hopkins University School of Medicine
Gabor Fichtinger	Johns Hopkins University

496 Null Point Imaging: a Joint Acquisition/Analysis Paradigm for MR Classification

Alain Pitiot	LIDA, Brain & Body Centre, University of Nottingham
John Totman	Brain & Body Centre, University of Nottingham
Penny Gowland	SPMMRC, University of Nottingham

499 Error Analysis of Calibration Materials on Dual-energy Mammography

Xuanqin Mou	Institute of Image Processing and Pattern Recognition, Xi'an Jiaotong University
Xi Chen	Institute of Image Processing and Pattern Recognition, Xi'an Jiaotong University

500 Predictive K-PLSR Myocardial Contractility Modeling with Phase Contrast MR Velocity Mapping

Su-Lin Lee	Imperial College London, United Kingdom
Qian Wu	Imperial College London, United Kingdom
Andrew Huntbatch	Imperial College London, United Kingdom
Guang-Zhong Yang	Imperial College London, United Kingdom

501 Non-rigid registration of pre-procedural MR images with intra-procedural unenhanced CT images for improved targeting of tumors during liver radiofrequency ablations

Neculai Archip	Harvard Medical School and Brigham and Women's Hospital
Servet Tatli	Harvard Medical School and Brigham and Women's Hospital
Paul Morrison	Harvard Medical School and Brigham and Women's Hospital
Ferenc Jolesz	Harvard Medical School and Brigham and Women's Hospital
Simon Warfield	Harvard Medical School and Children's Hospital, Boston
Stuart Silverman	Harvard Medical School and Brigham and Women's Hospital

507 Spatio-Temporal Registration of Real Time 3D Ultrasound to Cardiovascular MR Sequences

Weiwei Zhang	University of Oxford
J. Alison Noble	University of Oxford
J. Michael Brady	University of Oxford

509 Variational Guidewire Tracking Using Phase Congruency

Greg Slabaugh	Siemens Corporate Research
Koon Kong	Georgia Institute of Technology
Gozde Unal	Siemens Corporate Research
Tong Fang	Siemens Corporate Research

510 Automatic Whole Heart Segmentation in Static Magnetic Resonance Image Volumes

Jochen Peters	Philips Research Europe - Aachen
Olivier Ecabert	Philips Research Europe - Aachen
Carsten Meyer	Philips Research Europe - Aachen
Hauke Schramm	Philips Research Europe - Aachen
Reinhard Kneser	Philips Research Europe - Aachen
Alexandra Groth	Philips Research Europe - Aachen
Juergen Weese	Philips Research Europe - Aachen

514 Automated Model-Based Rib Cage Segmentation and Labeling in CT Images

Tobias Klinder	Institut für Informationsverarbeitung, University of Hannover
Cristian Lorenz	Philips Research Europe, Hamburg
Jens von Berg	Philips Research Europe, Hamburg
Sebastian Dries	Philips Research Europe, Hamburg
Thomas Bülow	Philips Research Europe, Hamburg
Jörn Ostermann	Institut für Informationsverarbeitung, University of Hannover

516 Physically motivated enhancement of color images for fiber endoscopy

Christian Winter	University of Erlangen-Nuremberg
Thorsten Zerfass	Fraunhofer IIS
Matthias Elter	Fraunhofer IIS
Stephan Rupp	Fraunhofer IIS
Thomas Wittenberg	Fraunhofer IIS

524 Probabilistic Fiber Tracking using Particle Filtering

Fan Zhang	Dept. of Computer Science, University of York, York, YO10 5DD, UK
Casey Goodlett	Dept. of Computer Science, University of North Carolina at Chapel Hill, USA
Edwin Hancock	Dept. of Computer Science, University of York, York, YO10 5DD, UK
Guido Gerig	Dept. of Computer Science, University of North Carolina at Chapel Hill, USA

537 Multi-criteria trajectory planning for hepatic radiofrequency ablation

Claire Baegert	IRCAD \ LSIIT Université Louis Pasteur Strasbourg
Caroline Villard	LSIIT / Université Louis Pasteur Strasbourg
Pascal Schreck	LSIIT / Université Louis Pasteur Strasbourg
Luc Soler	IRCAD

539* Population Based Analysis of Directional Information in Serial Deformation Tensor Morphometry

Colin Studholme Dept. Radiology, University of California San Francisco
Valerie Cardenas Dept. Radiology, University of California San Francisco

543 Automatic Centerline Extraction of Irregular Tubular Structures Using Probability Volumes From Confocal Imaging

Alberto Santamaria- University of Houston
Pang
Costa M. Colbert University of Houston
Peter Saggau Baylor College of Medicine
Ioannis A. Kakadiaris University of Houston

544 Analysis of Deformation of the Human Ear and Canal Caused by Mandibular Movement

Sune Darkner Informatics and Mathematical Modeling, Technical University of Denmark
Rasmus Larsen Informatics and Mathematical Modeling, Technical University of Denmark
Rasmus R. Paulsen Oticon A/S

552* Medical and Technical Protocols for Automatic Navigation of a Wireless Device in the Carotid Artery of a Living Swine Using a Standard Clinical MRI System

Sylvain Martel Ecole Polytechnique Montreal (EPM)
Jean-Baptiste Ecole Polytechnique Montreal (EPM)
Mathieu
Ouajdi Felfoul Ecole Polytechnique Montreal (EPM)
Arnaud Chanu Ecole Polytechnique Montreal (EPM)
Eric Aboussouan Ecole Polytechnique Montreal (EPM)
Samer Tamaz Ecole Polytechnique Montreal (EPM)
Pierre Poupponeau Ecole Polytechnique Montreal (EPM)
L'Hocine Yahia Ecole Polytechnique Montreal (EPM)
Gilles Beaudoin Université de Montréal
Gilles Soulez Université de Montréal

562 Eye-Gaze Driven Surgical Workflow Segmentation

Adam James Imperial College London
Douglas Vieira Imperial College London
Benny Lo Imperial College London
Ara Darzi Imperial College London
Guang-Zhong Yang Imperial College London

570* Image Guidance of Intracardiac Ultrasound with Fusion of Pre-operative Images

Yiyong Sun	Siemens Corporate Research
Samuel Kadoury	Siemens Corporate Research
Yong Li	Siemens Corporate Research
Matthias John	Siemens Medical Solutions
Jeff Resnick	Siemens Medical Solutions
Gerry Plambeck	Siemens Medical Solutions
Rui Liao	Siemens Corporate Research
Frank Sauer	Siemens Corporate Research
Chenyang Xu	Siemens Corporate Research

572 Instrumentation for Epidural Anesthesia

King-wei Hor	University of British Columbia
Denis Tran	University of British Columbia
Allaudin Kamani	B.C. Women's Hospital
Vickie Lessoway	B.C. Women's Hospital
Robert Rohling	University of British Columbia

575 Automatic Fetal Measurements in Ultrasound Using Constrained Probabilistic Boosting Tree

Gustavo Carneiro	Siemens Corporate Research
Georgescu Bogdan	Siemens Corporate Research
Good Sara	Siemens Medical Solutions
Comaniciu Dorin	Siemens Corporate Research

578 Registration of Lung Tissue between Fluoroscope and CT Images: Determination of Beam Gating Parameters in Radiotherapy

Sukmoon Chang	Penn State University / Rutgers University
Jinghao Zhou	Rutgers University
Qingshan Liu	Rutgers University
Dimitris Metaxas	Rutgers University
Bruce Haffty	UMDNJ-Robert Wood Johnson Medical School
Sung Kim	UMDNJ-Robert Wood Johnson Medical School
Salma Jabbour	UMDNJ-Robert Wood Johnson Medical School
Ning Yue	UMDNJ-Robert Wood Johnson Medical School

583 MCMC Curve Sampling for Image Segmentation

Ayres Fan	Massachusetts Institute of Technology
John Fisher	Massachusetts Institute of Technology
William Wells	Massachusetts Institute of Technology \ Brigham and Women's Hospital, Harvard Medical School
James Levitt	Brigham and Women's Hospital, Harvard Medical School \ VA Boston Healthcare System-Brockton Division, Harvard Medical School
Alan Willsky	Massachusetts Institute of Technology

585* Simulation and Fully Automatic Multimodal Registration of Medical Ultrasound

Wolfgang Wein	Siemens Corporate Research (SCR), Princeton, USA \ Chair for Computer Aided Medical Procedures (CAMP), TU Munich, Germany
Ali Khamene	Siemens Corporate Research (SCR), Princeton, USA
Dirk-Andre Clevert	University Hospitals Munich-Grosshadern, Germany
Oliver Kutter	Chair for Computer Aided Medical Procedures (CAMP), TU Munich, Germany
Nassir Navab	Chair for Computer Aided Medical Procedures (CAMP), TU Munich, Germany

589* Modeling Glioma Growth and Mass Effect in 3D MR Images of the Brain

Cosmina Hogea	Section of Biomedical Image Analysis, Department of Radiology, University of Pennsylvania
Christos Davatzikos	Section of Biomedical Image Analysis, Department of Radiology, University of Pennsylvania
George Biros	Department of Mechanical Engineering and Applied Mechanics, University of Pennsylvania

590 Quality-based Registration and Reconstruction of Optical Tomography Volumes

Wolfgang Wein	Siemens Corporate Research (SCR), Princeton, USA \ Chair for Computer Aided Medical Procedures, TU Munich, Germany
Moritz Blume	Chair for Computer Aided Medical Procedures, TU Munich, Germany
Ulrich Leischner	Max Planck Institute of Psychiatry, Munich, Germany
Hans-Ulrich Dodt	Max Planck Institute of Psychiatry, Munich, Germany
Nassir Navab	Chair for Computer Aided Medical Procedures, TU Munich, Germany

601 Detecting Mechanical Abnormalities in Prostate Tissue using FE-Based Image Registration

Patrick Courtis	University of Western Ontario
Abbas Samani	University of Western Ontario

609 Bias Image Correction via Stationarity Maximization

Thierry Dorval	Institut Pasteur Korea
Arnaud Ogier	Institut Pasteur Korea
Auguste Genovesio	Institut Pasteur Korea

612 Landmark Correspondence Optimization for Coupled Surfaces

Lin Shi	Department of Computer Science and Engineering, Shun Hing Institute of Advanced Engineering, The Chinese University of Hong Kong
Defeng Wang	Department of Computer Science and Engineering, Shun Hing Institute of Advanced Engineering, The Chinese University of Hong Kong
Pheng Ann Heng	Department of Computer Science and Engineering, Shun Hing Institute of Advanced Engineering, The Chinese University of Hong Kong
Tien-Tsin Wong	Department of Computer Science and Engineering, Shun Hing Institute of Advanced Engineering, The Chinese University of Hong Kong
Winnie CW Chu	Department of Diagnostic Radiology and Organ Imaging, The Chinese University of Hong Kong
Benson HY Yeung	Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong
Jack CY Cheng	Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong

620 A new method for spherical object detection and its application to computer aided detection of pulmonary nodules in CT images

Xiangwei Zhang	The University of Iowa
Jonathan Stockel	Siemens Medical Solutions
Matthias Wolf	Siemens Medical Solutions
Pascal Cathier	Siemens Medical Solutions
Geoffrey McLennan	The University of Iowa
Eric Hoffman	The University of Iowa
Milan Sonka	The University of Iowa

625 Thoracoscopic surgical navigation system for cancer localization in collapsed lung based on estimation of lung deformation

Masahiko Nakamoto	Osaka University Graduate School of Medicine
Naoki Aburaya	Osaka University Graduate School of Medicine
Kozo Konishi	Kyushu University Graduate School of Medical Sciences
Ichiro Yoshino	Kyushu University Graduate School of Medical Sciences
Makoto Hashizume	Kyushu University Graduate School of Medical Sciences
Yoshinobu Sato	Osaka University Graduate School of Medicine

626 Design and Preliminary Accuracy Studies of an MRI-Guided Transrectal Prostate Intervention System

Axel Krieger	Department of Mechanical Engineering, Johns Hopkins University
Csaba Csoma	Department of Mechanical Engineering, Johns Hopkins University
Iulian I. Iordachita	Department of Mechanical Engineering, Johns Hopkins University
Peter Guion	Radiation Oncology Branch, NCI - NIH-DHHS
Anurag K. Singh	Radiation Oncology Branch, NCI - NIH-DHHS
Gabor Fichtinger	Department of Mechanical Engineering, Johns Hopkins University
Louis L. Whitcomb	Department of Mechanical Engineering, Johns Hopkins University

632 A Study of Hippocampal Shape Difference Between Genders by Efficient Hypothesis Test and Discriminative Deformation

Luping Zhou	RSISE, Australian National University
Richard Hartley	RSISE, Australian National University \ Vision Science and Technology program, NICTA, Australia
Paulette Lieby	Vision Science and Technology program, NICTA, Australia
Nick Barnes	Vision Science and Technology program, NICTA, Australia
Kaarin Anstey	Centre for Mental Health Research, Australian National University
Nicolas Cherbuin	Centre for Mental Health Research, Australian National University
Perminder Sachdev	Neuropsychiatric Institute, Prince of Wales Hospital, Sydney

634 A Multi-View Opto-Xray Imaging System

Joerg Traub	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
Tim Hauke Heibel	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
Philipp Dressel	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
Sandro Michael Heining	Trauma Surgery Department Klinikum Innenstadt \ LMU, Munich, Germany
Rainer Graumann	Siemens Medical SP, Erlangen, Germany
Nassir Navab	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany

635 Magneto-optic Tracking of a Flexible Laparoscopic Ultrasound Transducer for Laparoscope Augmentation

Marco Feuerstein	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
Tobias Reichl	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
Jakob Vogel	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
Armin Schneider	Department of Surgery, Klinikum rechts der Isar, TUM, Munich, Germany
Hubertus Feussner	Department of Surgery, Klinikum rechts der Isar, TUM, Munich, Germany
Nassir Navab	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany

642 Automatic Trajectory Planning for Deep Brain Stimulation: A Feasibility Study

Ellen J.L. Brunenberg	Department of Biomedical Engineering, Eindhoven University of Technology
Anna Vilanova	Department of Biomedical Engineering, Eindhoven University of Technology
Veerle Visser-Vandewalle	Department of Neurosurgery, Maastricht University Hospital, The Netherlands
Yasin Temel	Department of Neurosurgery, Maastricht University Hospital, The Netherlands
Linda Ackermans	Department of Neurosurgery, Maastricht University Hospital, The Netherlands
Bram Platel	Department of Biomedical Engineering, Maastricht University Hospital, The Netherlands
Bart M. ter Haar Romeny	Department of Biomedical Engineering, Eindhoven University of Technology

645 Motion and Positional Error Correction for Cone Beam 3D-Reconstruction with Mobile C-arms

Christoph Bodensteiner	University of Luebeck
Cristina Darolti	University of Luebeck
Hanno Schumacher	University of Luebeck
Lars Matthaeus	University of Luebeck
Achim Schweikard	University of Luebeck

646 Signal LMMSE estimation from multiple samples in MRI and DT-MRI

Santiago Aja-Fernández	Universidad de Valladolid
Carlos Alberola-López	Universidad de Valladolid
Carl-Fredrik Westin	Brighan and Women's Hospital

649 Quantifying Calcification in the Lumbar Aorta on X-Ray Images

Lars Conrad-Hansen	Nordic Bioscience A/S, Copenhagen, Denmark
Marleen de Bruijne	Department of Computer Science, University of Copenhagen, Denmark
Francois Lauze	Nordic Bioscience A/S, Copenhagen, Denmark
Laszlo Tanko	Center for Clinical and Basic Research A/S, Copenhagen, Denmark
Paola Pettersen	Center for Clinical and Basic Research A/S, Copenhagen, Denmark
Qing He	Department of Radiology, Beijing Friendship Hospital, China
Jianghong Chen	Department of Radiology, Beijing Friendship Hospital, China
Claus Christiansen	Nordic Bioscience A/S, Copenhagen, Denmark; Center for Clinical and Basic Research A/S, Copenhagen, Denmark
Mads Nielsen	Department of Computer Science, University of Copenhagen, Denmark; Nordic Bioscience A/S, Copenhagen, Denmark

650 Automatic inference of sulcus patterns using 3D moment invariants

Zhong Yi Sun	Neurospin, I2BM, CEA IFR 49
Denis Riviere	Neurospin, I2BM, CEA IFR 49
Fabrice Poupon	Neurospin, I2BM, CEA IFR 49
Jean Regis	Service de Neurochirurgie Fonctionnelle, CHU La Timone
Jean-Francois Mangin	Neurospin, I2BM, CEA IFR 49

652 A New and General Method for Blind Shift-Variant Deconvolution of Biomedical Images

Moritz Blume	TU München \ Siemens Corporate Research
Darko Zikic	TU München \ Siemens Corporate Research
Wolfgang Wein	TU München \ Siemens Corporate Research
Nassir Navab	TU München \ Siemens Corporate Research

655* Cardiolock : an active cardiac stabilizer - First in vivo experiments using a new robotized device

Wael Bachta	LSIIT (UMR CNRS-ULP 7005), Strasbourg I University, France
Pierre Renaud	LGECO - INSA Strasbourg, France
Edouard Laroche	LSIIT (UMR CNRS-ULP 7005), Strasbourg I University, France
Antonello Forgione	IRCAD / EITS, University Hospital of Strasbourg, France
Jacques Gangloff	LSIIT (UMR CNRS-ULP 7005), Strasbourg I University, France

656 A Point-Wise Quantification of Asymmetry Using Deformation Fields. Application to the Study of the Crouzon Mouse Model

Hildur Olafsdottir	Technical University of Denmark; 3D-Laboratory (School of Dentistry, University of Copenhagen; Copenhagen University Hospital; Informatics and Mathematical Modelling, Technical University of Denmark)
Stephanie Lanche	3D-Laboratory, (School of Dentistry, University of Copenhagen; Copenhagen University Hospital; Informatics and Mathematical Modelling, Technical University of Denmark); Technical University of Denmark; Ecole Supérieure de Chimie Physique Electronique de Lyon (ESCPE Lyon), France
Tron A. Darvann	3D-Laboratory, (School of Dentistry, University of Copenhagen; Copenhagen University Hospital; Informatics and Mathematical Modelling, Technical University of Denmark)
Nuno V. Hermann	3D-Laboratory (School of Dentistry, University of Copenhagen; Copenhagen University Hospital; Informatics and Mathematical Modelling, Technical University of Denmark); University of Copenhagen
Rasmus Larsen	Technical University of Denmark
Bjarne K. Ersboell	Technical University of Denmark
Estanislao Oubel	Pompeu Fabra University
Alejandro F. Frangi	Pompeu Fabra University
Per Larsen	3D-Laboratory (School of Dentistry, University of Copenhagen; Copenhagen University Hospital; Informatics and Mathematical Modelling, Technical University of Denmark)
Chad A. Perlyn	Washington University School of Medicine
Gillian M. Morriss-Kay	Oxford University
Sven Kreiborg	3D-Laboratory (School of Dentistry, University of Copenhagen, Copenhagen University Hospital; Informatics and Mathematical, Modelling, Technical University of Denmark); University of Copenhagen; Copenhagen University Hospital

657 Real-time Modeling of Vascular Flow for Angiography Simulation

Xunlei Wu	CIMIT Simulation Group \ Harvard Medical School
Jeremie Allard	CIMIT Simulation Group
Stephane Cotin	CIMIT Simulation Group \ Harvard Medical School \ INRIA

660 Vessel and Intracranial Aneurysm Segmentation using Multi-Range Filters and Local Variances

Max W.K. Law	Lo Kwee-Seong Medical Image Analysis Laboratory, Department of Computer Science, The Hong Kong University of Science and Technology
Albert C.S. Chung	Lo Kwee-Seong Medical Image Analysis Laboratory, Department of Computer Science, The Hong Kong University of Science and Technology

664 A family of principal component analyses for dealing with outliers

Juan Eugenio Iglesias	Department of Computer Science of the University of Copenhagen
Marleen de Bruijne	Department of Computer Science of the University of Copenhagen and Nordic Bioscience A/S
Marco Loog	Department of Computer Science of the University of Copenhagen and Nordic Bioscience A/S
Francois Lauze	Nordic Bioscience A/S
Mads Nielsen	Department of Computer Science of the University of Copenhagen and Nordic Bioscience A/S

669 A Duality Based Algorithm for TV-L1-Optical-Flow Image Registration

Thomas Pock	Institute for Computer Graphics and Vision, Graz University of Technology
Martin Urschler	Institute for Computer Graphics and Vision, Graz University of Technology
Christopher Zach	VRVis Research Center, Graz
Reinhard Beichel	Dept. of Electrical & Computer Engineering and Dept. of Internal Medicine, The University of Iowa
Horst Bischof	Institute for Computer Graphics and Vision, Graz University of Technology

673 Fast and Robust Analysis of Dynamic Contrast Enhanced MRI Datasets

Olga Kubassova	University of Leeds, Leeds, UK
Mikael Boesen	The Parker Institute Frederiksberg Hospital, Frederiksberg, Denmark
Roger Boyle	University of Leeds, Leeds, UK
Karl Erik Jensen	Rigshospitalet, Department of Radiology, MRI division, Copenhagen, Denmark
Henning Bliddal	Frederiksberg Hospital, Frederiksberg, Denmark
Marco Cimmino	Clinica Reumatologica, Department of Medicine, University of Genoa, Italy
Alexandra Radjenovic	Department of Medical Physics, Leeds General Infirmary, Leeds

674 Anisotropic Wave Propagation and Apparent Conductivity Estimation in a Fast Electrophysiological Model: Application to XMR Interventional Imaging

Phani Chinchapatnam	University College, London
Kawal Rhode	King's College, London
Andrew King	King's College, London
Gang Gao	University College, London
Yingliang Ma	King's College London
Tobias Schaeffter	King's College, London
David Hawkes	University College, London
Reza Razavi	King's College, London
Derek Hill	University College, London
Simon Arridge	University College, London
Maxime Sermesant	King's College London \ Inria Sophia Antipolis

679 Quantitative Comparison of Two Cortical Surface Extraction Methods Using MRI Phantoms

Simon Eskildsen	Aalborg University
Lasse Østergaard	Aalborg University

681 Nonlinear Analysis of BOLD Signal: Biophysical Modeling, physiological states, and functional activation

Zhenghui Hu Medical Image Computing Group, Hong Kong University of Science and Technology, Hong Kong.

Pengcheng Shi Medical Image Computing Group, Hong Kong University of Science and Technology, Hong Kong.

683 Automatic Segmentation of Blood Vessels from Dynamic MRI Datasets

Olga Kubassova School of Computing, University of Leeds

685* 3D Reconstruction of Internal Organ Surfaces for Minimal Invasive Surgery

Mingxing Hu Centre for Medical Image Computing, University College London

Graeme Penney Centre for Medical Image Computing, University College London

Philip Edwards Department of Surgical Oncology and Technology, Imperial College London

Michael Figl Department of Surgical Oncology and Technology, Imperial College London

David Hawkes Centre for Medical Image Computing, University College London

690 Clinical Evaluation of a Respiratory Gated Guidance System for Liver Punctures

Stephane Nicolau IRCAD

Xavier Pennec inria

Luc Soler ircad

Nicholas Ayache inria

692 Longitudinal Cortical Registration for Developing Neonates

Hui Xue Imaging Sciences Department, Imperial College London, UK \ Department of Computing, Imperial College, London, UK

Latha Srinivasan Imaging Sciences Department, Imperial College London, UK \ Department of Computing, Imperial College, London, UK \ Department of Paediatrics, Imperial College, London, UK

Shuzhou Jiang Imaging Sciences Department, Imperial College London, UK

Mary Rutherford Imaging Sciences Department, Imperial College London, UK

A David Edwards Imaging Sciences Department, Imperial College London, UK \ Department of Paediatrics, Imperial College, London, UK

Daniel Rueckert Department of Computing, Imperial College, London, UK

Joseph V Hajnal Imaging Sciences Department, Imperial College London, UK \ Department of Paediatrics, Imperial College, London, UK

695 Bronchoscope tracking without fiducial markers using ultra-tiny electromagnetic tracking system and its evaluation in different environment

Kensaku Mori	Nagoya University
Daisuke Deguchi	Nagoya Univeristy
Kazuyoshi Ishitani	Nagoya University
Takayuki Kitasaka	Nagoya University
Yasuhito Suenaga	Nagoya University
Yoshinori Hasegawa	Nagoya University
Kazuyoshi Imaizumi	Nagoya University
Hirotsugu Takabatake	Minami Sanjyo Hospital

696 Automatic Segmentation of Bladder and Prostate Using Coupled 3D Deformable Models

Jimena Costa	INRIA
Herve Delingette	INRIA
Sebastien Novellas	C.H.U. L'Archet
Nicholas Ayache	INRIA

700 Prediction of Respiratory Motion with Wavelet-based Multiscale Autoregression

Floris Ernst	University of Lübeck
Alexander Schlaefer	University of Lübeck
Achim Schweikard	University of Lübeck

701 Towards an Identification of Tumor Growth Parameters from Time Series of Images

Ender Konukoglu	Asclepios Research Project, INRIA Sophia-Antipolis
Olivier Clatz	Asclepios Research Project, INRIA Sophia-Antipolis
Maxime Sermesant	Asclepios Research Project, INRIA Sophia-Antipolis
Pierre-Yves Bondiau	Centre Antoine Lacassagne, Nice, France
Herve Delingette	Asclepios Research Project, INRIA Sophia-Antipolis
Nicholas Ayache	Asclepios Research Project, INRIA Sophia-Antipolis

703 Fiducial-Free Registration Procedure for Navigated Bronchoscopy

Tassilo Klein	TU München
Joerg Traub	TU München
Alireza Ahmadian	Tehran University of Medical Sciences
Hubert Hautmann	TU München
Nassir Navab	TU München

707 Towards Subject-Specific Models of the Dynamic Heart for Image-Guided Mitral Valve Surgery

Cristian Linte	Imaging Research Laboratories, Robarts Research Institute
Marcin Wierzbicki	Imaging Research Laboratories, Robarts Research Institute
John Moore	Imaging Research Laboratories, Robarts Research Institute
Stephen Little	Division of Cardiology, University of Western Ontario
Gerard Guiraudon	Canadian Surgical Technologies and Advanced Robotics
Terry Peters	Imaging Research Laboratories, Robarts Research Institute

708 Shape Analysis Using a Point-Based Statistical Shape Model Built on Correspondence Probabilities

Heike Hufnagel INRIA \ Med. University Hamburg Eppendorf
Xavier Pennec INRIA
Jan Ehrhardt Med. University Hamburg Eppendorf
Heinz Handels Med. University Hamburg Eppendorf
Nicholas Ayache INRIA

718 Generating fiber crossing phantoms out of experimental DWIs

Matthan Caan Academic Medical Center Amsterdam \ Delft University of Technology
Anne Willem de Vries Delft University of Technology
Ganesh Khedoe Delft University of Technology
Erik Akkerman Academic Medical Center Amsterdam
Lucas van Vliet Delft University of Technology
Kees Grimbergen Academic Medical Center Amsterdam
Frans Vos Academic Medical Center Amsterdam, Delft University of Technology

719 Non-local means variants for denoising of diffusion-weighted and diffusion tensor MRI

Nicolas Wiest-Daessle INRIA
Sylvain Prima INRIA
Pierrick Coupe Universite Rennes-1
Sean Patrick Morrissey CHU Pontchaillou
Christian Barillot CNRS

721 A Bayesian 3D Volume Reconstruction for Confocal Micro-rotation Cell Imaging

Yong Yu ENS CACHAN
Alain Trouvé ENS CACHAN
Bernard Chalmoud ENS CACHAN

723 On Simulating Subjective Evaluation Using Combined Objective Metrics for Validation of 3D Tumor Segmentation

Xiang Deng Corporate Technology, Siemens Ltd., China
Lei Zhu Corporate Technology, Siemens Ltd., China
Yiyong Sun Siemens Corporate Research, USA
Chenyang Xu Siemens Corporate Research, USA
Lan Song Peking Union Medical College Hospital, China
Jiahong Chen Medical Solutions, Siemens Ltd., China
Reto Merges Medical Solutions, Siemens Ltd., China
Marie-Pierre Jolly Siemens Corporate Research, USA
Michael Suehling Siemens Medical Solutions, Germany
Xiaodong Xu Corporate Technology, Siemens Ltd., China

725 Groupwise combined segmentation and registration for atlas construction

Kanwal Bhatia	Visual Information Processing Group, Department of Computing, Imperial College London
Paul Aljabar	Visual Information Processing Group, Department of Computing, Imperial College London
James Boardman	Department of Paediatrics, Imperial College London \ Hammersmith Hospital
Latha Srinivasan	Department of Paediatrics, Imperial College London \ Hammersmith Hospital
Maria Murgasova	Visual Information Processing Group, Department of Computing, Imperial College London
Serena Counsell	MRC Clinical Sciences Centre, Imperial College London \ Hammersmith Hospital
Mary Rutherford	MRC Clinical Sciences Centre, Imperial College London \ Hammersmith Hospital
Jo Hajnal	MRC Clinical Sciences Centre, Imperial College London \ Hammersmith Hospital
David Edwards	Department of Paediatrics, Imperial College London \ MRC Clinical Sciences Centre, Imperial College London \ Hammersmith Hospital
Daniel Rueckert	Visual Information Processing Group, Department of Computing, Imperial College London

727 Classifier selection strategies for label fusion using large atlas databases

Paul Aljabar	Imperial College London
Alexander Hammers	Imperial College London
Rolf Heckemann	Imperial College London
Joseph Hajnal	Imperial College London
Daniel Rueckert	Imperial College London

731 Assessment of Perceptual Quality for Gaze-Contingent Motion Stabilization in Robotic Assisted Minimally Invasive Surgery

George P. Mylonas	Imperial College London
Ara Darzi	Imperial College London
Guang-Zhong Yang	Imperial College London

732 Quantifying Effect-Specific Mammographic Density

Jakob Raundahl	University of Copenhagen
Marco Loog	University of Copenhagen
Paola Pettersen	Center for Clinical and Basic Research
Mads Nielsen	University of Copenhagen

733 Prostate Implant Reconstruction with Discrete Tomography

Xiaofeng Liu	Johns Hopkins University
Ameet Jain	Johns Hopkins University
Gabor Fichtinger	Johns Hopkins University

735 Towards intra-operative 3D nuclear imaging: reconstruction of 3D radioactive distributions using tracked gamma probes

Thomas Wendler	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
Alexander Hartl	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
Tobias Lasser	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
Joerg Traub	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
Farhad Daghighian	IntraMedical Imaging LLC, Los Angeles, CA, USA
Sibylle I. Ziegler	Department of Nuclearmedicine, Klinikum rechts der Isar, TUM, Munich, Germany
Nassir Navab	Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany

736 Fully Automated and Adaptive Detection of Amyloid Plaques in Stained Brain Sections of Alzheimer Transgenic Mice

Abdelmonem Feki	MIRGen, URA CEA-CNRS, Orsay, France \ Ecole Centrale Paris, Chatenay-Malabry, France
Olivier Teboul	MIRGen, URA CEA-CNRS, Orsay, France \ Ecole Centrale Paris, Chatenay-Malabry, France
Albertine Dubois	MIRGen, URA CEA-CNRS 2210, Orsay, France
Bruno Bozon	NANC, UMR 8620 CNRS-Universite Paris Sud, Orsay, France
Alexis Faure	NANC, UMR 8620 CNRS-Universite Paris Sud, Orsay, France
Philippe Hantraye	MIRGen, URA CEA-CNRS 2210, Orsay, France
Marc Dhenain	MIRGen, URA CEA-CNRS 2210, Orsay, France
Benoit Delatour	NANC, UMR 8620 CNRS-Universite Paris Sud, Orsay, France
Thierry Delzescaux	MIRGen, URA CEA-CNRS 2210, Orsay, France

738 Outlier Rejection for Diffusion Weighted Images

Marc Niethammer	Brigham & Women's Hospital
Sylvain Bouix	Brigham & Women's Hospital
Santiago Aja Fernandez	Brigham & Women's Hospital
Carl-Fredrik Westin	Brigham & Women's Hospital
Martha Shenton	Brigham & Women's Hospital

740 Evaluation of a novel calibration technique for optically tracked oblique laparoscopes

Stijn De Buck	Faculties of Medicine and Engineering, Medical Image Computing (ESAT and Radiology), K.U.Leuven
Frederik Maes	Faculties of Medicine and Engineering, Medical Image Computing (ESAT and Radiology), K.U.Leuven
Andre D'Hoore	Department of Abdominal Surgery, UZ Leuven
Suetens Paul	Faculties of Medicine and Engineering, Medical Image Computing (ESAT and Radiology), K.U.Leuven

744 Characterizing spatio-temporal patterns for disease similarity detection in cardiac echo videos

Tanveer Syeda-Mahmood	IBM Almaden Research Center, San Jose, CA
Fei Wang	IBM Almaden Research Center, San Jose, CA
David Beymer	IBM Almaden Research Center, San Jose, CA
Martin London	UCSF Veterans Hospital, San Francisco, CA
Rajshekar Reddy	Mediciti Hospital, Hyderabad, India.

- 758 Deformable Density Matching for 3D Non-rigid Registration of Shapes**
- Arunabha Roy GE Global Research Center
 Ajay Gopinath GE Global Research Center
 Anand Rangarajan University of Florida
- 760 Real-time fusion of ultrasound and gamma probe for navigated localization of liver metastases**
- Thomas Wendler Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
 Marco Feuerstein Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
 Joerg Traub Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
 Tobias Lasser Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
 Jakob Vogel Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
 Farhad Daghighian IntraMedical Imaging LLC, Los Angeles, CA, USA
 Sibylle I. Ziegler Department of Nuclearmedicine, Klinikum rechts der Isar, TUM, Munich, Germany
 Nassir Navab Computer Aided Medical Procedures (CAMP), TUM, Munich, Germany
- 762 Tissue characterization using fractal dimension of high frequency ultrasound RF time series**
- Mehdi Moradi School of Computing, Queen's University
 Parvin Mousavi School of Computing, Queen's University
 Purang Abolmaesumi School of Computing, Department of Electrical and Computer Engineering, Queen's University
- 766 Proof of Concept of a Simple Computer-Assisted Technique for Correcting Bone Deformities**
- Burton Ma Kingston General Hospital
 Amber Simpson Queen's University
 Randy Ellis Queen's University
- 769 Bayesian Tracking of Tubular Structures and its Application to Carotid Arteries in CT Angiography**
- Michiel Schaap Erasmus Medical Center, Rotterdam. Departments of Radiology and Medical informatics.
 Rashindra Manniesing Erasmus Medical Center, Rotterdam. Departments of Radiology and Medical informatics.
 Ihor Smal Erasmus Medical Center, Rotterdam. Departments of Radiology and Medical informatics.
 Theo van Walsum Erasmus Medical Center, Rotterdam. Departments of Radiology and Medical informatics
 Aad van der Lugt Erasmus Medical Center, Rotterdam. Department of Radiology.
 Wiro Niessen Erasmus Medical Center, Rotterdam. Departments of Radiology and Medical informatics.
- 771 Global Registration of Multiple Point Sets: Feasibility and Applications in Multi-fragment Fracture Fixation**

Medhi Hedjazi Department of Electrical and Computer Engineering, Queen's University,
Moghari Kingston, Ontario, Canada
Purang Abolmaesumi School of Computing, Queen's University, Kingston, Ontario, Canada

773 Real-time Synthesis of Image Slices in Deformed Tissue from Nominal Volume Images

Orcun Goksel University of British Columbia
Septimiu E. University of British Columbia
Salcudean

780 Automatic Target and Trajectory Identification for Deep Brain Stimulation (DBS) Procedures

Ting Guo Robarts Research Institute University of Western Ontario
Andrew G. Parrent The London Health Sciences Centre
Terry M. Peters Robarts Research Institute University of Western Ontario

781 Toward optimal matching for 3D reconstruction of brachytherapy seeds

Christian Labat Johns Hopkins University
Ameet Jain Johns Hopkins University
Gabor Fichtinger Johns Hopkins University
Jerry Prince Johns Hopkins University

786 Γ -Convergence Approximation to Piecewise Smooth Medical Image Segmentation

Jungha An Siemens Corporate Research
Mikael Rousson Siemens Corporate Research
Chenyang Xu Siemens Corporate Research

790 Mixtures of Gaussians on Tensor Fields for DT-MRI Segmentation

Rodrigo de Luis- ETSI Telecomunicación, University of Valladolid
Garcia
Carlos Alberola- ETSI Telecomunicación, University of Valladolid
Lopez

793 A Coupled Finite Element Model of Tumor Growth and Vascularization

Bryn Lloyd Computer Vision Laboratory, ETH Zürich
Dominik Szczerba Computer Vision Laboratory, ETH Zürich
Gábor Székely Computer Vision Laboratory, ETH Zürich

796 Clinical Neonatal Brain MRI Segmentation using Adaptive Nonparametric Data Models and Intensity-based Markov Priors

Zhuang Song	University of Pennsylvania
Suyash Awate	University of Pennsylvania
Daniel Licht	Children's Hospital of Philadelphia
James Gee	University of Pennsylvania

798 Evaluation of Shape-Based Normalization in the Corpus Callosum for White Matter Connectivity Analysis

Hui Sun	Department of Radiology, University of Pennsylvania, Philadelphia, USA
Paul Yushkevich	Department of Radiology, University of Pennsylvania, Philadelphia, USA
Hui Zhang	Department of Radiology, University of Pennsylvania, Philadelphia, USA
Philip Cook	Department of Radiology, University of Pennsylvania, Philadelphia, USA
Jeffrey Duda	Department of Radiology, University of Pennsylvania, Philadelphia, USA
Tony Simon	M.I.N.D. Institute, University of California, Davis, USA
James Gee	Department of Radiology, University of Pennsylvania, Philadelphia, USA

803 Mean Template for Tensor-Based Morphometry using Deformation Tensors

Natasha Lepore	Laboratory of Neuro Imaging, UCLA, Los Angeles, CA 90095, USA
Caroline Brun	Laboratory of Neuro Imaging, UCLA, Los Angeles, CA 90095, USA
Xavier Pennec	Asclepius Research Project, INRIA Sophia-Antipolis, 2004 route des Lucioles 06902 Sophia-Antipolis Cedex, France
Yi-Yu Chou	Laboratory of Neuro Imaging, UCLA, Los Angeles, CA 90095, USA
Oscar L. Lopez	Department of Psychiatry, University of Pittsburgh, Pittsburgh, PA 15213 USA
Howard J. Aizenstein	Department of Neurology, University of Pittsburgh, Pittsburgh, PA 15213 USA
James T. Becker	Department of Neurology, University of Pittsburgh, Pittsburgh, PA 15213 USA
Arthur W. Toga	Laboratory of Neuro Imaging, UCLA, Los Angeles, CA 90095, USA
Paul M. Thompson	Laboratory of Neuro Imaging, UCLA, Los Angeles, CA 90095, USA

805 A Comprehensive System for Intraoperative 3D Brain Deformation Recovery

Christine DeLorenzo	Yale University
Xenophon Papademetris	Yale University
Kenneth Vives	Yale University
Dennis Spencer	Yale University
James Duncan	Yale University

812* Three-dimensional Ultrasound Mosaicing

Christian Wachinger	Technical University Munich \ Siemens Corporate Research
Wolfgang Wein	Technical University Munich, Siemens Corporate Research
Nassir Navab	Technical University Munich

814 Automated extraction of lymph nodes from 3-D abdominal CT images using 3-D minimum directional difference filter

Takayuki Kitasaka	Graduate School of Information Science, Nagoya University
Yoshihiko Nakamura	Graduate School of Information Science, Nagoya University
Yukihiro Tsujimura	Graduate School of Information Science, Nagoya University
Kensaku Mori	Graduate School of Information Science, Nagoya University
Yasuhiro Suenaga	Graduate School of Information Science, Nagoya University
Masaaki Ito	National Cancer Center Hospital East
Shigeru Nawano	National Cancer Center Hospital East

815 A New Benchmark for Shape Correspondence Evaluation

Brent Munsell	University of South Carolina
Pahal Dalal	University of South Carolina
Song Wang	University of South Carolina

816 Nonrigid Image Registration with Subdivision Lattices: Application to Cardiac MR Image Analysis

Raghavendra Chandrashekhara	Imperial College London
Raad Mohiaddin	Imperial College London
Reza Razavi	King's College London
Daniel Rueckert	Imperial College London

824 Multivariate Normalization with Symmetric Diffeomorphisms for Multivariate Studies

Brian Avants	University of Pennsylvania
J. Duda	University of Pennsylvania
H. Zhang	University of Pennsylvania
J. Gee	University of Pennsylvania

825* Contributions to 3D diffeomorphic atlas estimation: application to brain images

Matias Nicolas Bossa	University of Zaragoza
Monica Hernandez	University of Zaragoza
Salvador Olmos	University of Zaragoza

826* Spatiotemporal Normalization for Longitudinal Analysis of Gray Matter Atrophy in Frontotemporal Dementia

Brian Avants	University of Pennsylvania
C. Anderson	University of Pennsylvania
M. Grossman	University of Pennsylvania

827 Graph Cuts Framework for Kidney Segmentation with Prior Shape Constraints

Asem Ali	CVIP Lab., University of Louisville
Aly Farag	CVIP Lab., University of Louisville
Ayman El-Baz	Bioengineering Dept., University of Louisville

- 828 Detection and Segmentation of Pathological Structures by the Extended Graph-Shifts Algorithm**
- | | |
|---------------|---------------------------------------|
| Jason Corso | University of California, Los Angeles |
| Alan Yuille | University of California, Los Angeles |
| Nancy Sicotte | University of California, Los Angeles |
| Arthur Toga | University of California, Los Angeles |
- 831 A Novel 3D Multi-Scale Lineness Filter for Vessel Detection**
- | | |
|-------------------------|------------------------------------|
| Edwin H.E. Bennink | Eindhoven University of Technology |
| Hans C. van Assen | Eindhoven University of Technology |
| Geert J. Streekstra | University of Amsterdam |
| Rene ter Wee | University of Amsterdam |
| Jos A.E. Spaan | University of Amsterdam |
| Bart M. ter Haar Romeny | Eindhoven University of Technology |
| Bart M. ter Haar Romeny | Eindhoven University of Technology |
- 832 Robust Autonomous Model Learning from 2D and 3D Data Sets**
- | | |
|-------------------|---|
| Georg Langs | ICG, Graz University of Technology |
| Rene Donner | ICG, Graz University of Technology |
| Philipp Peloschek | Department for Radiology, Medical University Vienna |
| Horst Bischof | ICG, Graz University of Technology |
- 833 A Probabilistic Framework for Tracking Deformable Soft Tissue in Minimally Invasive Surgery**
- | | |
|-------------------|-------------------------|
| Peter Mountney | Imperial College London |
| Benny Lo | Imperial College London |
| Surapa Thiemjarus | Imperial College London |
| Danail Stoyanov | Imperial College London |
| Guang Zhong-Yang | Imperial College London |
- 834 A Multiphysics Simulation of a Healthy and a Diseased Abdominal Aorta**
- | | |
|--------------------------------|------------|
| Robert Hugh Puckridge McGregor | BIWI, ETHZ |
| Dominik Szczerba | BIWI, ETHZ |
| Gábor Székely | BIWI, ETHZ |
- 840 Rotational Roadmapping: A New Image-based Navigation Technique for the Interventional Room**
- | | |
|--------------|---------------------------|
| Markus Kukuk | Siemens Medical Solutions |
| Sandy Napel | Stanford University |
- 843* Geodesic-Loxodromes for Diffusion Tensor Interpolation and Difference Measurement**

Gordon Kindlmann	Harvard Medical School
Raúl San José Estépar	Harvard Medical School
Marc Niethammer	Harvard Medical School
Steven Haker	Harvard Medical School
Carl-Fredrik Westin	Harvard Medical School

848 Registration of Cardiac SPECT/CT Data through Weighted Intensity Co-Occurrence Priors

Christoph Guetter	Siemens Corporate Research, Inc.
Matthias Wacker	Siemens Corporate Research, Inc.
Chenyang Xu	Siemens Corporate Research, Inc.
Joachim Hornegger	University of Erlangen

850* Generalized Surface Flows for Deformable Registration and Cortical Matching

Ilya Eckstein	University of Southern Cal. (USC)
Anand Joshi	Signal and Image Processing Institute, University of Southern Cal. (USC)
Richard Leahy	Signal and Image Processing Institute, University of Southern Cal. (USC)
C.-C. Jay Kuo	Signal and Image Processing Institute, University of Southern Cal. (USC)
Mathieu Desbrun	Department of Computer Science, Caltech

852 Small Animal Radiation Research Platform; Imaging, Mechanics, Control and Calibration

Mohammad Matinfar	Johns Hopkins University
Owen Gray	Johns Hopkins University
Iulian Iordachita	Johns Hopkins University
Chris Kennedy	Johns Hopkins Medical Institution
Erik Ford	Johns Hopkins Medical Institution
John Wong	Johns Hopkins Medical Institution
Russel Taylor	Johns Hopkins University
Peter Kazanzides	Johns Hopkins University

853 De-enhancing the Dynamic Contrast-Enhanced Breast MRI for Robust Registration

Yuanjie Zheng	Department of Radiology, University of Pennsylvania & Department of Computer and Information Sciences, University of Delaware
Jingyi Yu	Department of Computer and Information Sciences, University of Delaware
Chandra Kambhamettu	Department of Computer and Information Sciences, University of Delaware
Sarah Englander	Department of Radiology, University of Pennsylvania
Mitchell Schnall	Department of Radiology, University of Pennsylvania
Dinggang Shen	Department of Radiology, University of Pennsylvania

857 Precise Estimation of Postoperative Cup Alignment from Single Standard X-ray Radiograph with Gonadal Shielding

Guoyan Zheng	MEM Research Center - ISTB \ University of Bern
Simon Steppacher	Department of Orthopaedic Surgery, Inselspital, University of Bern
Xuan Zhang	MEM Research Center - ISTB \ University of Bern
Moritz Tannast	Department of Orthopaedic Surgery, Inselspital, University of Bern

862 Cortical Hemisphere Registration via Large Deformation Diffeomorphic Metric Curve Mapping

Anqi Qiu	Division of Bioengineering, National University of Singapore
Michael I. Miller	Center for Imaging Science, Johns Hopkins University

866* Segmentation of Myocardial Volumes From Real-time 3D Echocardiography Using An Incompressibility Constraint

Yun Zhu	Yale University
Xenophon Papademetris	Yale University
Albert Sinusas	Yale University
James Duncan	Yale University

867 Registration of High Angular Resolution Diffusion MRI Images using 4th Order Tensors

Angelos Barmountis	University of Florida
Baba C. Vemuri	University of Florida
John R. Forder	University of Florida

870 Soft Level Set Coupling for LV Segmentation in Gated Perfusion SPECT

Timo Kohlberger	Siemens Corporate Research
Gareth Funka-Lea	Siemens Corporate Research
Vladimir Desch	Siemens Corporate Research

871 On Fiducial Target Registration Error in the Presence of Anisotropic Noise

Burton Ma	Kingston General Hospital
Mehdi Moghari	Queen's University
Randy Ellis	Queen's University
Purang Abolmaesumi	Queen's University

873 Deformable 2D-3D Registration of the Pelvis with a Limited Field of View, Using Shape Statistics

Ofri Sadowsky	Johns Hopkins University, \ Department of Computer Science
Gouthami Chintalapani	Johns Hopkins University, Department of Computer Science
Russell Taylor	Johns Hopkins University Department of Computer Science

879 Autism Diagnostics by 3D Texture Analysis of Cerebral White Matter Gyrfications

Ayman El-Baz	Bioengineering Department, University of Louisville, USA
Manuel Casanova	Department of Psychiatry and Behavioral Science, University of Louisville, USA.
Georgy Gimel'farb	Computer Science Department, University of Auckland, Auckland, New Zealand.
Meghan Mott	Department of Psychiatry and Behavioral Science, University of Louisville, USA.
Andrew Switala	Department of Psychiatry and Behavioral Science, University of Louisville, USA.

885 Rapid Voxel Classification Methodology for Interactive 3D Medical Image Visualization

Qi Zhang	Robarts Research Institute
Roy Eagleson	Robarts Research Institute
Terry Peters	Robarts Research Institute

888 Shape Registration by Simultaneously Optimizing Representation and Transformation

Yifeng Jiang	The Chinese University of Hong Kong
Jun Xie	University of Central Florida
Deqing Sun	The Chinese University of Hong Kong
Hung-tat Tsui	The Chinese University of Hong Kong

890 Effectiveness of the Finite Impulse Response Model in Content-based fMRI Image Retrieval

Bing Bai	Rutgers University
Paul Kantor	Rutgers University
Ali Shokoufandeh	Drexel University

893 Object Localization based on Markov Random Fields and Symmetry Interest Points

Rene Donner	Institute for Computer Graphics and Vision, TU Graz \ Pattern Recognition and Image Processing Group, TU Wien
Branislav Micusik	Pattern Recognition and Image Processing Group, TU Wien
Georg Langs	Laboratoire de Mathematiques Appliquees aux Systemes, Ecole Centrale de Paris, France \ Institute for Computer Graphics and Vision, TU Graz
Lech Szumilas	Pattern Recognition and Image Processing Group, TU Wien
Philipp Peloschek	Department of Radiology, Medical University Vienna
Klaus Friedrich	Department of Radiology, Medical University Vienna
Horst Bischof	Institute for Computer Graphics and Vision, TU Graz

895 2D Motion Analysis of Long Axis Cardiac Tagged MRI

Ting Chen	NYU
Sohae Chung	NYU
Leon Axel	NYU

897 Non-rigid Surface Registration Using Spherical Thin-plate Splines

Guangyu Zou	Wayne State University
Jing Hua	Wayne State University
Otto Muzik	Wayne State University

900* Automated segmentation of the liver from 3D CT images using probabilistic atlas and multi-level statistical shape model

Toshiyuki Okada	Osaka University Graduate School of Medicine
Ryuji Shimada	Osaka University Graduate School of Medicine
Yoshinobu Sato	Osaka University Graduate School of Medicine
Masatoshi Hori	Osaka University Graduate School of Medicine
Keita Yokota	Osaka University Graduate School of Medicine
Masahiko Nakamoto	Osaka University Graduate School of Medicine
Yen-Wei Chen	Ritsumeikan University
Hironobu Nakamura	Osaka University Graduate School of Medicine
Shinichi Tamura	Osaka University Graduate School of Medicine

905 Customised Cytoarchitectonic Probability Maps Using Deformable Registration: Primary Auditory Cortex

Lara Bailey	School of Computing, Queen's University, Ontario, Canada
Purang Abolmaesumi	School of Computing, Department of Electrical and Computer Engineering, Queen's University, Ontario, Canada
Julian Tam	School of Computing, Queen's University, Ontario, Canada
Patricia Morosan	Institute of Medicine, Research Center Juelich, Juelich, Germany
Rhodri Cusack	MRC Cognition and Brain Sciences Unit, Cambridge, England
Katrin Amunts	Institute of Medicine, Research Center Juelich, Juelich, Germany
Ingrid Johnsrude	Department of Psychology, Queen's University, Ontario, Canada

910* Cell Population Tracking and Lineage Construction with Spatiotemporal Context

Kang Li	Carnegie Mellon University
Mei Chen	Intel Research Pittsburgh
Takeo Kanade	Carnegie Mellon University

911 A Probabilistic Model for Haustral Curvatures with Applications to Colon CAD

John Melonakos	School of ECE, Georgia Institute of Technology
Paulo Mendonca	GE Global Research
Rahul Bhotika	GE Global Research
Saad Sirohey	GE Healthcare

912 Ultrasound Myocardial Elastography And Registered 3D Tagged MRI: Quantitative Strain Comparison

Zhen Qian	Rutgers University
Wei-Ning Lee	Columbia Univeristy
Elisa Konofagou	Columbia University
Dimitris Metaxas	Rutgers University
Leon Axel	New York University

913 Similarity metrics for groupwise non-rigid registration

Kanwal Bhatia	Visual Information Processing Group, Department of Computing, Imperial College London
Jo Hajnal	Imaging Sciences Department, MRC Clinical Sciences Centre, Imperial College London, Hammersmith Hospital, London
Alexander Hammers	Division of Neuroscience, Faculty of Medicine, Imperial College London, Hammersmith Hospital
Daniel Rueckert	Visual Information Processing Group, Department of Computing, Imperial College London

915 Statistical Atlases of Bone Anatomy: Construction, Iterative Improvement and Validation

Gouthami Chintalapani	Johns Hopkins University
Lotta Ellingsen	Johns Hopkins University
Ofri Sadowsky	Johns Hopkins University
Jerry Prince	Johns Hopkins University
Russell Taylor	Johns Hopkins University

917 3D Medical Image Segmentation Based on Adaptive Metamorph Model

Junzhou Huang	Rutgers University
Xiaolei Huang	Lehigh University
Dimitris Metaxas	Rutgers University
Leon Axel	New York University

920* A Hierarchical Unsupervised Clustering Scheme for Detection of Prostate Cancer from Magnetic Resonance Spectroscopy (MRS)

Pallavi Tiwari	Rutgers, the State University of New Jersey
Anant Madabhushi	Rutgers, the State University of New Jersey
Mark Rosen	University of Pennsylvania

927 New Motion Correction Models for Automatic Identification of Renal Transplant Rejection

Ayman El-Baz	Bioengineering Department, University of Louisville, Louisville, KY, USA.
Georgy Gimel'farb	Department of Computer Science, University of Auckland, New Zealand.
Mohamed A. El-Ghar	Urology and Nephrology Department, University of Mansoura, Mansoura, Egypt.

928 Unbiased White Matter Atlas Construction Using Diffusion Tensor Images

Hui Zhang	University of Pennsylvania
Paul Yushkevich	University of Pennsylvania
Daniel Rueckert	Imperial College
James Gee	University of Pennsylvania

952 Spline Based Inhomogeneity Correction for [11]C-PIB PET Segmentation Using Expectation Maximization

Parnesh Raniga	BioMedIA Lab, CSIRO, Brisbane, Australia \ University of Sydney, Sydney, Australia
Pierrick Bourgeat	BioMedIA Lab, CSIRO, Brisbane, Australia
Victor Villemagne	Department of Nuclear Medicine and Centre for PET, Austin Hospital, Melbourne, Australia
Graeme O'Keefe	Department of Nuclear Medicine and Centre for PET, Austin Hospital, Melbourne, Australia
Christopher Rowe	Department of Nuclear Medicine and Centre for PET, Austin Hospital, Melbourne, Australia
Sebastien Ourselin	BioMedIA Lab, CSIRO, Brisbane, Australia

* Indicates papers which have been selected for podium presentation.