

M. Jorge Cardoso

Room 3.07, Wolfson House,
4 Stephenson Way
NW1 2HE
London, UK

☎ +44 7549929026

✉ m.jorge.cardoso@ucl.ac.uk

EDUCATION

2008 – 2012 **PhD in Medical Image Computing**, Centre for Medical Image Computing, University College London, UK.

Thesis *Automated Morphometric Characterization of the Cerebral Cortex for the Developing and Ageing Brain*

Supervisors: Prof. Sebastien Ourselin and Prof. Nick C. Fox

2006 – 2008 **2-year MSc in Biomedical Engineering - Medical Electronics and Computing**, Universidade do Minho, Portugal.

Grade: 18.6 out of 20.0 - Best Student Award

Thesis *Automated Segmentation of Multiple Sclerosis Lesions by Model Outlier Detection*

Supervisors: Prof. Andrew Todd-Pokropek and Dr. Carlos Lima

2003 – 2006 **3-year Bachelor in Biomedical Engineering**, Universidade do Minho, Portugal.

Grade: 17.2 out of 20.0 - Best Student Award

CURRENT POSITION

2015 – Now **Lecturer in Quantitative Neuroradiology**, CMIC, UCL, UK.

2015 – Now **Technical Lead**, Quantitative Neuroradiology Initiative.

Joint venture between the Centre for Medical Image Computing (CMIC) and the National Hospital for Neurology and Neurosurgery (NHNN)

Aim: To translate advanced image and data analysis techniques towards radiological use by creating a computational infrastructure within the hospital and embed data analysis techniques within the clinical workflow

PREVIOUS POSITIONS/WORK EXPERIENCE

2014 – 2015 **Senior Research Associate**, Centre for Medical Image Computing, University College London, UK.

Funding NIHR UCLH BRC High Impact Initiative

Project *Translating Neuroimaging Biomarkers to Clinical Environment.*

2012 – 2014 **Research Associate**, Centre for Medical Image Computing, University College London, UK.

Funding EPSRC Programme Grant - Intelligent Imaging

Project *Combining brain structural morphometry and tissue microstructure for the development of novel biomarkers.*

2007 – 2008 **Internship**, Department of Medical Physics and Bioengineering, University College London, UK.

Title *Multimodal Brain Segmentation in Alzheimer's Disease.*

HONOURS AND AWARDS

2013 **Best paper award at MICCAI 2013 (co-authorship)**, "A Bayesian approach for spatially adaptive regularisation in non-rigid registration".

- 2012 **Winner of the MICCAI 2012 heart segmentation challenge (co-authorship)**,
"Automatic Right Ventricle Segmentation using Multi-Label Fusion in Cardiac MRI".
- 2011 **Best Poster Award at SPIE Medical Imaging Symposium (co-authorship)**,
Log-Euclidean free-form deformation.
- 2008 **Best Student Award - MSc in Biomedical Engineering**, Universidade do Minho,
 Portugal.
- 2007 **Best Student Award - Bachelor in Biomedical Engineering**, Universidade do
 Minho, Portugal.
- 2007 **1 year Exchange Program Scholarship**, *Department of Medical Physics and Bio-*
engineering, University College London, UK.

GRANTS/FUNDING

- 2016 **"Amyloid imaging to Prevent Alzheimer's Disease (AMYPAD)"**, *Innovative
 Medicines Initiative 2 - H2020*, €12M (Co-Investigator) - UCL Engineering PI.
- 2015 **"Dementia Modelling (DEMO)"**, *ITN Marie Sklodowska-Curie Actions*, €853K
 (Co-Investigator).
- 2015 **"DIADEM: A quantitative neuroradiology platform for diagnosis in demen-
 tia"**, *NHS SBRI Healthcare Phase 2*, £1M (co-applicant).
- 2015 **"DIADEM: A quantitative neuroradiology platform for diagnosis in demen-
 tia"**, *NHS SBRI Healthcare Phase 1*, £100k (co-applicant).
- 2015 **"Improving prevention trials in Alzheimer's disease through imaging"**,
Alzheimer's Society, (collaborator).
- 2008 **"Excellence" PhD Scholarship Award**, *Fundação para a Ciência e Tecnologia*,
 Portugal, £125k.

SOFTWARE DEVELOPMENT

- NiftySeg** Open source image segmentation and Parcellation software, containing programs to
 perform EM based segmentation and Parcellation through label fusion.
<http://niftyseg.sourceforge.net>
 Role: Main developer and creator of the software package. Community Impact: More
 than 4000+ downloads.
- NiftyReg** Open source image registration software, containing programs to perform both linear
 and non-linear image registration in an efficient manner.
<http://niftyreg.sourceforge.net>
 Role: Contributor. Community Impact: More than 8000+ downloads.

SOFTWARE LICENSING/PATENTS

Licensing

- 2014 *IXICO Ltd.* - Algorithms within NiftySeg and NiftyReg have been licensed for the
 purpose of atrophy estimation
- 2014 *Medtronic, inc* - Algorithms within NiftySeg and NiftyReg have been used for the
 purpose of brain segmentation for image guided therapy
- 2010 *IXICO Ltd.* Algorithms within NiftySeg and NiftyReg, have been licensed for the pur-
 pose of PET SUVR analysis

Patents #WO2014049368 - Applicant: UCL Business PLC - Title: A system and method for annotating images by propagating information (Pending - PCT)
#P110021GB - Applicant: UCL Business PLC - Title: Representing 3D Regional Brain Biomarkers in 2D (Pending)
<http://www.google.com/patents/WO2014049368A1>

DESSIMINATION AND PUBLIC ENGAGEMENT

IMAGING PLATFORMS

- Hipposeg* An online platform for hippocampal and brain segmentation and morphometric characterisation (hipposeg.cs.ucl.ac.uk), freely available to the clinical community. This platform is currently being used clinically at Chalfont Centre For Epilepsy and at St George's Hospital - <http://hipposeg.cs.ucl.ac.uk>
- NiftyWeb* An online software-as-service platform for algorithm deployment, freely available to the clinical community. This platform reduces the technological barriers between algorithm developers and users by providing a web-interface to highly optimised medical image analysis routines. The platform has been used 600+ times by researchers and clinicians from more than 13 different institutions - <http://cmictig.cs.ucl.ac.uk/niftyweb/>

PUBLIC ENGAGEMENT

- Seeing Dementia* A Join Dementia Research (JDR) NIHR-funded public engagement and citizen science initiative to "demonstrate the power of people to help improve clinical practice through research". This platform enables the public to take the doctor's chair and perform visual assessments of brain scans. Their input will help improve the accuracy of dementia diagnosis. - <http://seeingdementia.ucl.ac.uk>

ORGANISATION OF INTERNATIONAL EVENTS

- 2017 Workshop Co-Chair for the 2017 international conference on Medical Image Computing and Computer Aided Interaction (MICCAI 2017)
- 2017 Paper Selection Committee for the 25th biennial international conference on Information Processing in Medical Imaging (IPMI 2017)
- Oct 2016 Program Chair for the 3rd International Workshop for Bayesian and graphical Methods for Biomedical Imaging (BAMBI 2016), Munich, Germany (<http://bambi.cs.ucl.ac.uk/2016>)
- 2015 Paper Selection Committee for the 24th biennial international conference on Information Processing in Medical Imaging (IPMI 2015), Isle of Skye, UK (<http://ipmi2015.cs.ucl.ac.uk>)
- Sep 2015 Program Chair for the 2nd International Workshop for Bayesian and graphical Methods for Biomedical Imaging (BAMBI 2015), Munich, Germany (<http://bambi.cs.ucl.ac.uk/2015>)
- Sep 2014 Program Chair for the International Workshop for Bayesian and graphical Methods for Biomedical Imaging (BAMBI 2014), Boston, USA (<http://bambi.cs.ucl.ac.uk/2014/>)

PROCEEDINGS AND JOURNALS

- 2015 Guest editor of the Special Issue on Probabilistic Models for Biomedical Image Analysis, Computer Vision and Image Understanding, Elsevier
- 2015 Lead co-editor of Lecture Notes in Computer Science, Proceedings of the 24th biennial international conference on Information Processing in Medical Imaging (IPMI 2015)

- 2015 Lead co-editor of Lecture Notes in Computer Science, Proceedings of the Second International Workshop for Bayesian and graphical Methods for Biomedical Imaging (BAMBI 2015)
- 2014 Lead co-editor of Lecture Notes in Computer Science (LNCS 8677), Proceedings of the First International Workshop for Bayesian and graphical Methods for Biomedical Imaging (BAMBI 2014)
- Reviewer IEEE TMI, IEEE TBE, NeuroImage, Medical Image Analysis, Human Brain Mapping, Computer Vision and Image Understanding, Medical Physics and SIVP journals and for the MICCAI, IPMI, ISBI and IPCAI conferences.

CURRENT AND PREVIOUS STUDENTS

Primary supervision I am the primary supervisor of the following students.

- 2015-now Carla Semedo, MSc/PhD project
"Multimodal subthalamic nuclei segmentation"
- 2015-now Stefano Moriconi, MSc/PhD project
"Neurovascular parameterisation for population studies"

Non-primary supervision I am/was part of the supervisory team for following students within CMIC and within the Wellcome Trust Centre for Neuroimaging:

- 2014-now Claudia Blaiotta, MSc/PhD project - Main Supervisor: John Ashburner
"Morphological variability models for image segmentation"
- 2013-now Carole Sudre, MSc/PhD project - Main Supervisor: Sebastien Ourselin
"Automated lesion segmentation through outlier modelling"
- 2012-2015 Ninon Burgos, MSc/PhD project - Main Supervisor: Sebastien Ourselin
"Attenuation correction for PET-MR"
- 2011-2016 Ma Da, PhD Student - Main Supervisor: Sebastien Ourselin
"Structural Parcellation and Thickness Estimation for Mouse Brain Phenotyping"
- 2011-2016 Nick Powel, PhD Student - Main Supervisor: Sebastien Ourselin
"High-Throughput Morphometric Phenotyping of Mouse Brains and Embryos"
- 2011-2012 Carole Sudre, MSc Project - Main Supervisor: Sebastien Ourselin
"Multispectral Neonate Brain Segmentation"

Clinical Students I am the main technical supervisor of the following clinical students.

- 2014-now Emily Manning, MSc/PhD project - Main Supervisor: Jonathan Schott
"Clinical segmentation protocols for multimodal data"
- 2014-now Cassy Fiford, MSc/PhD project - Main Supervisor: Josephine Barnes
"Interactions between white matter disease and dementia"
- 2014-now Lorna Smith, MSc/PhD project - Main Supervisor: Rolf Jager
"Southall and Brent revisited visit 3 (SABRE 3): the 25 year follow-up"

TEACHING

- 2008-now *MPHYGB06*: Information Processing in Medical Imaging: Image segmentation - 14 hours per year (6 hours of lectures + 8 hours of workshops)
Medical Image Computing MSc., University College London, UK

- 2011-now *P3MV03*: Morphology and Volumetry: An Overview of Medical Image Segmentation
 - 2 hours of lectures per year
 Advanced Neuroimaging MSc., University College London, UK
- 2009-now *P3MV03*: Image Processing in Matlab - 3 hours of workshop per year
 Advanced Neuroimaging MSc., University College London, UK

INVITED PRESENTATIONS

- August 2015 EIBIR Summer School 2015, Dubrovnik, Croatia
 "Population-informed tissue segmentation and structural Parcellation of brain images"
- August 2015 UCL Medical Image Computing Summer School (MedICSS), London, UK
 "Probabilistic modelling for medical image segmentation"
- June 2014 Chalfont Hospital, Chalfont, UK
 "Unified post processing of MRI data using information propagation"
- Nov 2013 Institute of Biomedical Engineering, Oxford University, Oxford, UK
 "Imaging biomarker development at the Centre for Medical Image Computing"
- Sep 2013 KU Leuven, Leuven, Belgium
 "Information Propagation: application to segmentation, fusion and image synthesis"
- May 2013 Erasmus University, Rotterdam, Netherlands
 "Geodesic Information Flows: implicit graphs and their application to segmentation and fusion"
- Feb 2013 Institute of Nuclear Medicine, London, UK
 "NiftySeg: Segmentation, Parcellation and its applications"
- August 2011 EIBIR Summer School 2011, Dubrovnik, Croatia
 Organisation of the Journal Club and Student Events

PUBLICATION STATISTICS

- Publications 40 peer-reviewed journal papers, 60 full-length peer-reviewed proceedings and 40 conference abstracts. First author on 18 of these publications
- Presentations 2 IPMI oral presentations, 2 MICCAI oral presentations, 1 ISBI oral presentation and 1 SPIE oral presentation (honorable mention)
- Statistics h-index=19, i10-index=38
<http://scholar.google.co.uk/citations?user=BuJuSqkAAAAJ>

OTHER ACTIVITIES

Scientific Interests Medical Image Segmentation, Bayesian Statistics, Digital Topology, Hidden Markov Models, Neuroimaging Biomarkers, Cortical Thickness, Longitudinal Studies, Morphometric Studies.

PUBLICATIONS

JOURNAL PAPERS

2016

- J1 E Orasanu, A Melbourne, M J Cardoso, H Lomabert, G S Kendall, N J Robertson, N Marlow, S Ourselin, "Cortical folding of the preterm brain: a longitudinal analysis of extremely preterm born neonates using spectral matching", *Brain and Behavior*, May 2016
- J2 M Lorenzi, I J Simpson, A F Mendelson, S B Vos, M J Cardoso, M Modat, J M Schott, S Ourselin, "Multimodal Image Analysis in Alzheimer's Disease via Statistical Modelling of Non-local Intensity Correlations", *Nature Scientific reports*, 6, 2016
- J3 M Lehmann, A Melbourne, J C Dickson, R M Ahmed, M Modat, M J Cardoso, D L Thomas, E De Vita, S J Crutch, J D Warren, C J Mahoney, J Bomanji, B F Hutton, N C Fox, X Golay, S Ourselin, J M Schott, "A novel use of arterial spin labelling MRI to demonstrate focal hypoperfusion in individuals with posterior cortical atrophy: a multimodal imaging study", *Journal of Neurology, Neurosurgery and Psychiatry*, Jan 2016
- J4 A Melbourne, Z Eaton-Rosen, E Orasanu, D Price, A Bainbridge, M J Cardoso, G S Kendall, N J Robertson, N Marlow, S Ourselin, "Longitudinal development in the preterm thalamus and posterior white matter: MRI correlations between diffusion weighted imaging and T2 relaxometry", *Human Brain Mapping*, Mar 2016
- J5 T Sekine, N Burgos, G Warnock, M W Huellner, A Buck, E EGW ter Voert, M J Cardoso, B F Hutton, S Ourselin, P Veit-Haibach, G Delso, "Multi atlas-based attenuation correction for brain FDG-PET imaging using a TOF-PET/MR scanner—a comparison with clinical single atlas-and CT-based attenuation correction", *Journal of Nuclear Medicine*, Mar 2016
- J6 K A Andrews, K Frost, M Modat, M J Cardoso, C C Rowe, V Villemagne, N C Fox, S Ourselin, J M Schott, "Acceleration of hippocampal atrophy rates in asymptomatic amyloidosis", *Neurobiology of Aging*, 39, 99-107, Mar 2016
- J7 H E Holmes, N Colgan, O Ismail, D Ma, N M Powell, J M O'Callaghan, I F Harrison, R A Johnson, T K Murray, Z Ahmed, M Heggenes, A Fisher, MJ Cardoso, M Modat, S Walker-Samuel, E MC Fisher, S Ourselin, M J O'Neill, J A Wells, E C Collins, M F Lythgoe, "Imaging the accumulation and suppression of tau pathology using multiparametric MRI", *Neurobiology of Aging*, 39, 184-194, Mar 2016
- J8 C Blaiotta, M Jorge Cardoso, J Ashburner, "Variational inference for medical image segmentation", *Computer Vision and Image Understanding*, Apr 2016

2015

- J9 **M. Jorge Cardoso**, M. Modat, R. Wolz, A. Melbourne, D. Cash, D. Rueckert, S. Ourselin, "Geodesic information flows: spatially-variant graphs and their application to segmentation and fusion", *IEEE TMI*, 2015
- J10 J. D. Rohrer, J. M. Nicholas, D. M. Cash, J. van Swieten, E. Dopper, L. Jiskoot, R. van Minkelen, S. A. Rombouts, **M. Jorge Cardoso**, S. Clegg, M. Espak, S. Mead, D. L. Thomas, E. De Vita, M. Masellis, S. E. Black, M. Freedman, R. Keren, B. J. MacIntosh, E. Rogaeva, D. Tang-Wai, M. C. Tartaglia, R. Laforce, F. Tagliavini, P. Tiraboschi, V. Redaelli, S. Prioni, M. Grisoli, B. Borroni, A. Padovani, D. Galimberti, E. Scarpini, A. Arighi, G. Fumagalli, J. B. Rowe, I. Coyle-Gilchrist, C. Graff, M. Fallstrom, V. Jelic, A. K. Stahlbom, C. Andersson, H. Thonberg, L. Lilius, G. B. Frisoni, M. Pievani, M. Bocchetta, L. Benussi, R. Ghidoni, E. Finger, S. Sorbi, B. Nacmias, G. Lombardi, C. Polito, J. D. Warren, S. Ourselin, N. C. Fox, and M. N. Rossor, "Presymptomatic cognitive and neuroanatomical changes in genetic frontotemporal dementia in the Genetic Frontotemporal dementia Initiative (GENFI) study: a cross-sectional analysis.", *Lancet Neurology*, vol. 14, no. 3, pp. 253-262, Mar. 2015.

- J11 C Sudre, **M. Jorge Cardoso**, W Bouvy, G Biessels, J Barnes, S Ourselin, "Bayesian model selection for pathological neuroimaging data applied to white matter lesion segmentation", *IEEE TMI*, 2015
- J12 M Kochan, P Daga, N Burgos, M White, **M. Jorge Cardoso**, L Mancini, G P Winston, A W McEvoy, J Thornton, T Yousry, J S Duncan, D Stoyanov, S Ourselin, "Simulated field maps for susceptibility artefact correction in interventional MRI", *IJCARS*, 10(9), 1405-1416, 2015
- J13 E Manning, K McDonald, K Leung, J Young, T, Pepple, M Lehmann, M Zuluaga Valencia, MJ Cardoso, J Schott, S Ourselin, S Crutch, N Fox, J Barnes, "Differential hippocampal shapes in posterior cortical atrophy patients: a comparison with control and typical AD subjects", *Human Brain Mapping*, 2015
- J14 A K Hoang Duc, G Eminowicz, R Mendes, S Wong, J McClelland, M Modat, **M. Jorge Cardoso**, A F Mendelson, C Veiga, T Kadir, D D'ÁSouza, S Ourselin, "Validation of clinical acceptability of an atlas-based segmentation algorithm for the delineation of organs at risk in head and neck cancer", *Medical physics*, 42 (9), 5027-5034
- J15 IJA Simpson, **M. Jorge Cardoso**, M Modat, DM Cash, MW Woolrich, JLR Andersson, JA Schnabel, S Ourselin, "Probabilistic Non-Linear Registration with Spatially Adaptive Regularisation", *Medical image analysis*, 2015
- J16 KA Andrews, C Frost, M Modat, **M. Jorge Cardoso**, CC Rowe, V Villemagne, NC Fox, S Ourselin, JM Schott, "Acceleration of hippocampal atrophy rates in asymptomatic amyloidosis", *Neurobiology of Aging*, 2015
- J17 M Bocchetta, E Gordon, C R Marshall, C F Slattery, **M. Jorge Cardoso**, D M Cash, M Espak, M Modat, S Ourselin, G B Frisoni, J M Schott, J D Warren, J D Rohrer, "The habenula: an under-recognised area of importance in frontotemporal dementia?", *Journal of Neurology, Neurosurgery & Psychiatry*, 2015
- J18 D M Cash, C Frost, L O Iheme, D Unay, M Kandemir, J Fripp, O Salvado, P Bourgeat, M Reuter, B Fischl, M Lorenzi, G B Frisoni, X Pennec, R K Pierson, J L Gunter, M L Senjem, C R Jack, N Guizard, W S Fonov, D L Collins, M Modat, **M. Jorge Cardoso**, K K Leung, H Wang, S R Das, P A Yushkevich, I B Malone, N C Fox, J M Schott, S Ourselin, "Assessing atrophy measurement techniques in dementia: Results from the MIRIAD atrophy challenge", *NeuroImage*, 123, 149-164, 2015
- J19 P SJ Weston, R W Paterson, M Modat, N Burgos, **M. Jorge Cardoso**, N Magdalinou, M Lehmann, J Dickson, A Barnes, J B Bomanji, I Kayani, D M Cash, S Ourselin, J Toombs, M P Lunn, C J Mummery, J D Warren, M N Rossor, N C Fox, H Zetterberg, J M Schott, "Using florbetapir positron emission tomography to explore cerebrospinal fluid cut points and gray zones in small sample sizes", *Alzheimer's & Dementia*, 2015
- J20 J. A. Wells, J. M. O'Callaghan, H. E. Holmes, N. M. Powell, R. A. Johnson, B. Siow, F. Torrealdea, O. Ismail, S. Walker-Samuel, X. Golay, M. Rega, S. Richardson, M. Modat, **M. Jorge Cardoso**, S. Ourselin, A. J. Schwarz, Z. Ahmed, T. K. Murray, M. J. O'Neill, E. C. Collins, N. Colgan, and M. F. Lythgoe, "In vivo imaging of tau pathology using multi-parametric quantitative MRI.," *NeuroImage*, vol. 111, pp. 369-378, Feb. 2015.
- J21 I. Isgum, M. J. N. L. Benders, B. Avants, **M. Jorge Cardoso**, S. J. Counsell, E. F. Gomez, L. Gui, P. S. Huppi, K. J. Kersbergen, A. Makropoulos, A. Melbourne, P. Moeskops, C. P. Mol, M. Kuklisova-Murgasova, D. Rueckert, J. A. Schnabel, V. Srhoj-Egekher, J. Wu, S. Wang, L. S. de Vries, and M. A. Viergever, "Evaluation of automatic neonatal brain segmentation algorithms: the NeoBrainS12 challenge.," *MedIA*, vol. 20, no. 1, pp. 135-151, Feb. 2015.

- J22 Z. Eaton-Rosen, A. Melbourne, E. Orasanu, **M. Jorge Cardoso**, M. Modat, A. Bainbridge, G. S. Kendall, N. J. Robertson, N. Marlow, and S. Ourselin, "Longitudinal measurement of the developing grey matter in preterm subjects using multi-modal MRI," *NeuroImage*, Feb. 2015.
- J23 N Burgos, **M. Jorge Cardoso**, K Thielemans, M Modat, J Dickson, J M Schott, D Atkinson, S R Arridge, B F Hutton, S Ourselin, "Multi-contrast attenuation map synthesis for PET/MR scanners: assessment on FDG and Florbetapir PET tracers", 42(9), 1447-1458, *European Journal of Nuclear Medicine and Molecular Imaging*, 2015

2014

- J24 E. Orasanu, A. Melbourne, **M. Jorge Cardoso**, M. Modat, A. M. Taylor, S. Thayyil, and S. Ourselin, "Brain volume estimation from post-mortem newborn and fetal MRI," *NeuroImage: clinical*, vol. In Press, Oct. 2014.
- J25 R. S. Samson, **M. Jorge Cardoso**, N. Muhler, V. Sethi, C. A. Wheeler-Kingshott, M. Ron, S. Ourselin, D. H. Miller, and D. T. Chard, "Investigation of outer cortical magnetisation transfer ratio abnormalities in multiple sclerosis clinical subgroups," *Multiple Sclerosis*, vol. 20, no. 10, pp. 1322-1330, Aug. 2014.
- J26 F. Prados, **M. Jorge Cardoso**, K. K. Leung, D. M. Cash, M. Modat, N. C. Fox, C. A. M. Wheeler-Kingshott, and S. Ourselin, "Measuring brain atrophy with a generalized formulation of the boundary shift integral," *Neurobiology of Aging*, in Press Aug. 2014.
- J27 D. Ma, **M. Jorge Cardoso**, M. Modat, N. Powell, J. Wells, H. Holmes, F. Wiseman, V. Tybulewicz, E. Fisher, M. F. Lythgoe, and S. Ourselin, "Automatic Structural Parcellation of Mouse Brain MRI Using Multi-Atlas Label Fusion," *PLoS ONE*, vol. 9, no. 1, p. e86576, Jan. 2014.
- J28 N. Burgos, **M. Jorge Cardoso**, K. Thielemans, M. Modat, J. M. Schott, J. S. Duncan, D. Atkinson, S. R. Arridge, B. F. Hutton, and S. Ourselin, "Attenuation Correction Synthesis for Hybrid PET-MR Scanners: Application to Brain Studies," *Medical Imaging, IEEE Transactions on*, no. 99, in Press, 2014.
- J29 Y. Liang, E. Gordon, J. Rohrer, L. Downey, R. de Silva, H. R. Jager, J. Nicholas, M. Modat, **M. Jorge Cardoso**, C. Mahoney, J. Warren, M. Rossor, N. Fox, and D. Caine, "A cognitive chameleon: lessons from a novel MAPT mutation case.," *Neurocase*, vol. 20, no. 6, pp. 684-694, 2014.
- J30 C. Petitjeana, M. A. Zuluagab, W. Baid, JN. Dacherc, D. Grosgeorgea, J. Caudronc, S. Ruana, I.B. Ayedh, M. Jorge Cardosob, H. Cheng, D. Jimenez-Carreterof, M. J. Ledesma-Carbayof, C. Davatzikosj, J. Doshij, G. Erusj, O. M.O. Maierf, C. M.S. N., Yangming Ouj, k, S. Ourselinb, C-W. Pengg, N. S. Peterse, T. M. Petersi, M. Rajchli, D. Rueckertd, A. Santos, W. Shid, Ching-Wei Wangg, Haiyan Wangd, Jing Yuani, "Right Ventricle Segmentation From Cardiac MRI: A Collation Study", *Medical Image Analysis*, in Press, 2014
- J31 C. S. Parker, F. Deligianni, M. J. Cardoso, P. Daga, M. Modat, M. Dayan, C.A. Clark, S. Ourselin, J. D. Clayden, "Consensus between Pipelines in Structural Brain Networks" *PLoS ONE* 9(10), 2014

2013

- J32 **M. Jorge Cardoso**, K. Leung, M. Modat, S. Keihaninejad, D. Cash, J. Barnes, N. C. Fox, S. Ourselin, Alzheimer's Disease Neuroimaging Initiative, "STEPS: Similarity and Truth Estimation for Propagated Segmentations and its application to hippocampal segmentation and brain Parcellation.," *Medical Image Analysis*, vol. 17, no. 6, pp. 671-684, Aug. 2013.

- J33 G. P. Winston, **M. Jorge Cardoso**, E. J. Williams, J. L. Burdett, P. A. Bartlett, M. Espak, C. Behr, J. S. Duncan, and S. Ourselin, "Automated hippocampal segmentation in patients with epilepsy: Available free online," *Epilepsia*, vol. 54, no. 12, pp. 2166-2173, Oct. 2013.
- J34 S. R. Irani, C. J. Stagg, J. M. Schott, C. R. Rosenthal, S. A. Schneider, P. Pettingill, R. Pettingill, P. Waters, A. Thomas, N. L. Voets, **M. Jorge Cardoso**, D. M. Cash, E. N. Manning, B. Lang, S. J. M. Smith, A. Vincent, and M. R. Johnson, "Faciobrachial dystonic seizures: the influence of immunotherapy on seizure control and prevention of cognitive impairment in a broadening phenotype," *Brain*, vol. 136, no. 10, pp. 3151-3162, Sep. 2013.
- J35 S. Keihaninejad, H. Zhang, N. S. Ryan, I. B. Malone, M. Modat, **M. Jorge Cardoso**, D. M. Cash, N. C. Fox, and S. Ourselin, "An unbiased longitudinal analysis framework for tracking white matter changes using diffusion tensor imaging with application to Alzheimer's disease.," *NeuroImage*, vol. 72, pp. 153-163, May 2013.
- J36 A. Melbourne, G. S. Kendall, **M. Jorge Cardoso**, R. Gunny, N. J. Robertson, N. Marlow, and S. Ourselin, "Preterm birth affects the developmental synergy between cortical folding and cortical connectivity observed on multimodal MRI," *NeuroImage*, vol. 89, pp. 23-34, 2013.
- J37 J. Young, M. Modat, **M. Jorge Cardoso**, A. Mendelson, D. Cash, and S. Ourselin, "Accurate multimodal probabilistic prediction of conversion to Alzheimer's disease in patients with mild cognitive impairment," *NeuroImage: clinical*, vol. 2, pp. 735-745, 2013.
- J38 K. A. Andrews, M. Modat, K. E. Macdonald, T. Yeatman, **M. Jorge Cardoso**, K. K. Leung, J. Barnes, V. L. Villemagne, C. C. Rowe, N. C. Fox, S. Ourselin, J. M. Schott, Australian Imaging Biomarkers, Lifestyle Flagship Study of Ageing, "Atrophy rates in asymptomatic amyloidosis: implications for Alzheimer prevention trials.," *PLoS ONE*, vol. 8, no. 3, p. e58816, 2013.
- J39 M. Modat, A. K. H. Duc, K. K. Leung, **M. Jorge Cardoso**, J. Barnes, T. Kadir, S. Ourselin, A. D. N. Initiative, others, "Using Manifold Learning for Atlas Selection in Multi-Atlas Segmentation," *PLoS ONE*, vol. 8, no. 8, p. e70059, 2013.

2012

- J40 **M. Jorge Cardoso**, A. Melbourne, G. S. Kendall, M. Modat, N. J. Robertson, N. Marlow, and S. Ourselin, "AdaPT: An adaptive preterm segmentation algorithm for neonatal brain MRI.," *NeuroImage*, vol. 65, pp. 97-108, Dec 2012.
- J41 T. Mertzaniidou, J. Hipwell, **M. Jorge Cardoso**, X. Zhang, C. Tanner, S. Ourselin, U. Bick, H. Huisman, N. Karssemeijer, and D. Hawkes, "MRI to X-ray mammography registration using a volume-preserving affine transformation," *Medical image analysis*, vol. 16, no. 5, pp. 966-975, Jul. 2012.
- J42 P. Daga, G. Winston, M. Modat, M. White, L. Mancini, **M. Jorge Cardoso**, M. Symms, J. Stretton, A. W. McEvoy, J. Thornton, C. Micallef, T. Yousry, D. J. Hawkes, J. S. Duncan, and S. Ourselin, "Accurate Localization of Optic Radiation During Neurosurgery in an Interventional MRI Suite," *Medical Imaging, IEEE Transactions on*, vol. 31, no. 4, pp. 882-891, Apr. 2012.
- J43 L. Han, J. H. Hipwell, C. Tanner, Z. Taylor, T. Mertzaniidou, **M. Jorge Cardoso**, S. Ourselin, and D. J. Hawkes, "Development of patient-specific biomechanical models for predicting large breast deformation.," *Physics in Medicine and Biology*, vol. 57, no. 2, pp. 455-472, Jan. 2012.

2011

- J44 **M. Jorge Cardoso**, M. J. Clarkson, G. R. Ridgway, M. Modat, N. C. Fox, and S. Ourselin, "LoAd: A locally adaptive cortical segmentation algorithm," *NeuroImage*, vol. 56, no. 3, pp. 1386-1397, Jun. 2011.
- J45 A. Melbourne, G. S. Kendall, **M. Jorge Cardoso**, P. San, C. Hagmann, A. Bainbridge, S. Ourselin, N. Marlow, and N. J. Robertson, "Automated Analysis of the Preterm Neonatal Cortex at Term Equivalent Age and Correlation with Cognitive Outcome at 1 Year Corrected Age," *Pediatric Research*, vol. 70, no. 12, pp. 193-193, Nov. 2011.
- J46 M. J. Clarkson, **M. Jorge Cardoso**, G. R. Ridgway, M. Modat, K. K. Leung, J. D. Rohrer, N. C. Fox, and S. Ourselin, "A comparison of voxel and surface based cortical thickness estimation methods.," *NeuroImage*, vol. 57, no. 3, pp. 856-865, Aug. 2011.
- J47 H. R. Roth, J. R. McClelland, D. J. Boone, M. Modat, **M. Jorge Cardoso**, T. E. Hampshire, M. Hu, S. Punwani, S. Ourselin, G. G. Slabaugh, S. Halligan, and D. J. Hawkes, "Registration of the endoluminal surfaces of the colon derived from prone and supine CT colonography," *Medical Physics*, vol. 38, no. 6, p. 3077, 2011.

FULL-LENGTH PEER-REVIEWED PROCEEDINGS

2015

- C1 **M. Jorge Cardoso**, C. Sudre, S. Ourselin, Template-based multimodal joint generative model of brain data, IPMI 2015
- C2 **M. Jorge Cardoso**, M Modat, T Vercauteren, S Ourselin, "Scale factor point spread function matching: beyond aliasing in image resampling", MICCAI 2015
- C3 A Melbourne, Z Eaton-Rosen, D Owen, **M. Jorge Cardoso** J Beckmann, D Atkinson, N Marlow, S Ourselin, "Measuring cortical neurite orientation dispersion and perfusion in preterm-born adolescents using multi-modal MRI", MICCAI 2015
- C4 D Ma, **M. Jorge Cardoso** M A. Zuluaga, M Modat, N Powell, M Lythgoe, S Ourselin, "Grey matter sublayer thickness estimation in the mouse cerebellum", MICCAI 2015
- C5 N Burgos, **M. Jorge Cardoso** A F. Mendelson, J Schott, D Atkinson, S R. Arridge, B Hutton, S Ourselin, "Subject-specific Models for the Analysis of Pathological FDG PET Data", MICCAI 2015
- C6 N Burgos, **M. Jorge Cardoso** F Guerreiro, C Veiga, M Modat, J McClelland, A Knopf, S Punwani, D Atkinson, S R. Arridge, B Hutton, S Ourselin, "Robust CT Synthesis for Radiotherapy Planning: Application to the Head & Neck region", MICCAI 2015
- C7 C Sudre, **M. Jorge Cardoso**, S Ourselin, "Modelling the longitudinal evolution of white matter disease", BAMBI 2015
- C8 C Blaiotta, J Ashburner, **M. Jorge Cardoso**, "Variational Inference for Image Segmentation", BAMBI 2015
- C9 C Klemt, M Modat, J Pichat, **M. Jorge Cardoso**, J Henckel, A Hart, S Ourselin, "Automatic assessment of volume asymmetries applied to hip abductor muscles in patients with hip arthroplasty", SPIE Medical Imaging, 94131M-94131M-7
- C10 B A Gutman, P T Fletcher, M J Cardoso, G M Fleishman, M Lorenzi, P M Thompson, S Ourselin, "A Riemannian Framework for Intrinsic Comparison of Closed Genus-Zero Shapes", IPMI 2015
- C11 A Mota, V Cuplov, J Schott, B Hutton, K Thielemans, I Drobnjak, J Dickson, J Bert, N Burgos, **M. Jorge Cardoso**, M Modat, S Ourselin, Kjell Erlandsson, "Establishment of an open database of realistic simulated data for evaluation of partial volume correction techniques in brain PET/MR", EJNMMI Physics, 2015

- C12 N Burgos, **M. Jorge Cardoso**, M Modat, S Punwani, D Atkinson, S R Arridge, B F Hutton, S Ourselin, "CT synthesis in the head & neck region for PET/MR attenuation correction: an iterative multi-atlas approach", *EJNMMI Physics*, 2015
- C13 N Burgos, **M. Jorge Cardoso**, M Modat, S Punwani, D Atkinson, S R Arridge, B F Hutton, S Ourselin, "CT synthesis in the head & neck region for PET/MR attenuation correction: an iterative multi-atlas approach", *EJNMMI Physics*, 2015
- C14 C Klemm, M Modat, J Pichat, MJ Cardoso, J Henkel, A Hart, S Ourselin, "Automatic assessment of volume asymmetries applied to hip abductor muscles in patients with hip arthroplasty", *SPIE Medical Imaging*, 2015

2014

- C15 A. Melbourne, Z. Eaton-Rosen, E. De Vita, A. Bainbridge, **M. Jorge Cardoso**, D. Price, E. Cady, G. S. Kendall, N. J. Robertson, N. Marlow, and S. Ourselin, "Multi-modal Measurement of the Myelin-to-Axon Diameter g-ratio in Preterm-born Neonates and Adult Controls," in *Medical Image Computing and Computer-Assisted Intervention*, 2014, vol. 8674, no. 34, pp. 268-275.
- C16 Z. Eaton-Rosen, A. Melbourne, E. Orasanu, M. Modat, **M. Jorge Cardoso**, A. Bainbridge, G. S. Kendall, N. J. Robertson, N. Marlow, and S. Ourselin, "Longitudinal Measurement of the Developing Thalamus in the Preterm Brain Using Multi-modal MRI," in *Medical Image Computing and Computer-Assisted Intervention*, 2014, vol. 8674, no. 35, pp. 276-283.
- C17 M. A. Zuluaga, R. Rodionov, M. Nowell, S. Achhala, G. Zombori, **M. Jorge Cardoso**, A. Miserocchi, A. W. McEvoy, J. S. Duncan, and S. Ourselin, "SEEG Trajectory Planning: Combining Stability, Structure and Scale in Vessel Extraction," in *Medical Image Computing and Computer-Assisted Intervention*, 2014, vol. 8674, no. 81, pp. 651-658.
- C18 C. H. Sudre, **M. Jorge Cardoso**, W. Bouvy, G. J. Biessels, J. Barnes, and S. Ourselin, "Bayesian Model Selection for Pathological Data," in *Medical Image Computing and Computer-Assisted Intervention*, 2014, vol. 8673, no. 41, pp. 323-330.
- C19 F. Prados, **M. Jorge Cardoso**, D. MacManus, C. A. M. Wheeler-Kingshott, and S. Ourselin, "A Modality-Agnostic Patch-Based Technique for Lesion Filling in Multiple Sclerosis," in *Medical Image Computing and Computer-Assisted Intervention*, 2014, vol. 8674, no. 97, pp. 781-788.
- C20 M. Modat, I. J. A. Simpson, **M. Jorge Cardoso**, D. M. Cash, N. Toussaint, N. C. Fox, and S. Ourselin, "Simulating Neurodegeneration through Longitudinal Population Analysis of Structural and Diffusion Weighted MRI Data," in *Medical Image Computing and Computer-Assisted Intervention*, 2014, vol. 8675, no. 8, pp. 57-64.
- C21 N. Burgos, **M. Jorge Cardoso**, K. Thielemans, and J. S. Duncan, "Attenuation correction synthesis for hybrid PET-MR scanners: validation for brain study applications," in *European Journal of Nuclear Medicine and Molecular Imaging*, 2014.
- C22 M. A. Zuluaga, A. Mendelson, **M. Jorge Cardoso**, A. M. Taylor, and S. Ourselin, "Multi-atlas based pathological stratification of D-TGA congenital heart disease," in *IEEE International Symposium on Biomedical Imaging: From Nano to Macro*, 2014, pp. 109-112.
- C23 Z. Eaton-Rosen, A. Melbourne, E. Orasanu, M. Modat, **M. Jorge Cardoso**, A. Bainbridge, G. Kendall, N. Robertson, N. Marlow, and S. Ourselin, "Longitudinal Measurement of the Developing Thalamus in the Preterm Brain Using Multi-modal MRI," in *Medical Image Computing and Computer-Assisted Intervention*, 2014, vol. 8674, pp. 276-283.

- C24 C. H. Sudre, **M. Jorge Cardoso**, and S. Ourselin, "Bilayered anatomically constrained split-and-merge expectation maximisation algorithm (BiASM) for brain segmentation," in *SPIE Medical Imaging*, 2014, vol. 9034, pp. 903411-903411-7.

2013

- C25 **M. Jorge Cardoso**, M. Modat, S. Ourselin, "BrainGraph: tissue segmentation using the Geodesic Information Flows framework," in *MICCAI SATA workshop*, 2013,
- C26 **M. Jorge Cardoso**, M. Modat, I. Simpson, and S. Ourselin, "Stratified Voxel-Based Morphometry (sVBM)," in *MICCAI Mathematical Foundations of Computational Anatomy*, 2013, p. 49.
- C27 M. A. Zuluaga, **M. Jorge Cardoso**, and M. Modat, "Multi-atlas propagation whole heart segmentation from MRI and CTA using a local normalised correlation coefficient criterion," in *Functional Imaging and Modeling of the Heart*, 2013.
- C28 A. Melbourne, Z. Eaton-Rosen, A. Bainbridge, G. S. Kendall, **M. Jorge Cardoso**, N. J. Robertson, N. Marlow, and S. Ourselin, "Measurement of Myelin in the Preterm Brain: Multi-compartment Diffusion Imaging and Multi-component T2 Relaxometry," in *Medical Image Computing and Computer-Assisted Intervention*, Berlin, 2013, vol. 8150, no. 42, pp. 336-344.
- C29 I. J. A. Simpson, M. W. Woolrich, **M. Jorge Cardoso**, D. M. Cash, M. Modat, J. A. Schnabel, and S. Ourselin, "A Bayesian approach for spatially adaptive regularisation in non-rigid registration.," in *Medical Image Computing and Computer-Assisted Intervention*, 2013, vol. 16, no. 2, pp. 10-18.
- C30 N. Burgos, **M. Jorge Cardoso**, M. Modat, S. Pedemonte, J. Dickson, J. S. Duncan, D. Atkinson, S. R. Arridge, B. F. Hutton, and S. Ourselin, "Attenuation correction synthesis for hybrid PET-MR scanners.," in *Medical Image Computing and Computer-Assisted Intervention*, 2013, vol. 16, no. 1, pp. 147-154.
- C31 J. Petersen, M. Modat, **M. Jorge Cardoso**, A. Dirksen, S. Ourselin, and M. de Bruijne, "Quantitative airway analysis in longitudinal studies using groupwise registration and 4D optimal surfaces," in *Medical Image Computing and Computer-Assisted Intervention*, 2013, pp. 287-294.
- C32 M. A. Zuluaga, **M. Jorge Cardoso**, M. Modat, and S. Ourselin, "Multi-atlas Propagation Whole Heart Segmentation from MRI and CTA Using a Local Normalised Correlation Coefficient Criterion," in *Functional Imaging and Modeling of the Heart*, 2013, vol. 7945, no. 21, pp. 174-181.

2012

- C33 **M. Jorge Cardoso**, M. Modat, S. Ourselin, S. Keihaninejad, and D. Cash, "Multi-STEPS: Multi-label similarity and truth estimation for propagated segmentations," in *Mathematical Methods for Biomedical Image Analysis*, 2012, pp. 153-158.
- C34 **M. Jorge Cardoso**, R. Wolz, M. Modat, N. C. Fox, D. Rueckert, and S. Ourselin, "Geodesic Information Flows," in *Medical Image Computing and Computer-Assisted Intervention*, 2012, vol. 7511, no. 33, pp. 262-270.
- C35 **M. Jorge Cardoso**, G. Winston, M. Modat, S. Keihaninejad, J. Duncan, and S. Ourselin, "Geodesic Shape-Based Averaging," in *Medical Image Computing and Computer-Assisted Intervention*, 2012, vol. 7512, no. 4, pp. 26-33.
- C36 J. Young, M. Modat, **M. Jorge Cardoso**, J. Ashburner, and S. Ourselin, "Classification of Alzheimer's disease patients and controls with Gaussian processes," in *IEEE International Symposium on Biomedical Imaging: From Nano to Macro*, 2012, pp. 1523-1526.
- C37 M. Modat, P. Daga, **M. Jorge Cardoso**, S. Ourselin, G. R. Ridgway, and J. Ashburner, "Parametric non-rigid registration using a stationary velocity field," in *Mathematical Methods for Biomedical Image Analysis*, 2012, pp. 145-150.

- C38 S. Pedemonte, **M. Jorge Cardoso**, S. R. Arridge, B. F. Hutton, and S. Ourselin, "Steady-state model of the radio-pharmaceutical uptake for MR-PET.," in *Medical Image Computing and Computer-Assisted Intervention*, 2012, vol. 15, no. 1, pp. 289-297.
- C39 A. Melbourne, G. S. Kendall, **M. Jorge Cardoso**, R. Gunney, N. J. Robertson, N. Marlow, and S. Ourselin, "Radial structure in the preterm cortex; persistence of the preterm phenotype at term equivalent age?," in *Medical Image Computing and Computer-Assisted Intervention*, 2012, pp. 256-263.
- C40 D. M. Cash, A. Melbourne, M. Modat, **M. Jorge Cardoso**, M. J. Clarkson, N. C. Fox, and S. Ourselin, "Cortical folding analysis on patients with Alzheimer's disease and mild cognitive impairment.," in *Medical Image Computing and Computer-Assisted Intervention*, Berlin, 2012, vol. 15, no. 3, pp. 289-296.
- C41 A. Melbourne, G. S. Kendall, **M. Jorge Cardoso**, R. Gunney, N. J. Robertson, N. Marlow, and S. Ourselin, "Radial structure in the preterm cortex; persistence of the preterm phenotype at term equivalent age?," in *Medical Image Computing and Computer-Assisted Intervention*, 2012, vol. 15, no. 3, pp. 256-263.
- C42 M. A. Zuluaga, **M. Jorge Cardoso**, and S. Ourselin, "Automatic right ventricle segmentation using multi-label fusion in cardiac MRI," in *Medical Image Computing and Computer-Assisted Intervention*, 2012.
- C43 D. Ma, M. Modat, **M. Jorge Cardoso**, N. Powell, H. Holmes, M. Lythgoe, and S. Ourselin, "Multi Atlas Segmentation applied to in vivo mouse brain MRI," in *MICCAI Grand Challenge and Workshop on Multi-Atlas Labeling*, 2012.
- C44 M. Modat, K. K. Leung, **M. Jorge Cardoso**, and N. C. Fox, "Atrophy Measurement Based on Segmentation Propagation and the Boundary Shift Integral Technique," in *MICCAI NIBAD*, 2012.
- C45 A. Melbourne, **M. Jorge Cardoso**, G. S. Kendall, N. J. Robertson, N. Marlow, and S. Ourselin, "NeoBrainS12 Challenge: Adaptive neonatal MRI brain segmentation with myelinated white matter class and automated extraction of ventricles I-IV," in *MICCAI NeoBrainS*, 2012.
- C46 M. Modat, **M. Jorge Cardoso**, P. Daga, D. Cash, N. C. Fox, and S. Ourselin, "Inverse-Consistent Symmetric Free Form Deformation," in *Workshop on Biomedical Image Registration*, Berlin, 2012, vol. 7359, no. 9, pp. 79-88.
- 2011**
- C47 **M. Jorge Cardoso**, A. Melbourne, G. S. Kendall, M. Modat, C. F. Haggmann, N. J. Robertson, N. Marlow, and S. Ourselin, "Adaptive Neonate Brain Segmentation," in *Medical Image Computing and Computer-Assisted Intervention*, Berlin, 2011, vol. 6893, no. 47, pp. 378-386.
- C48 **M. Jorge Cardoso**, M. J. Clarkson, M. Modat, G. R. Ridgway, and S. Ourselin, "Locally weighted Markov random fields for cortical segmentation," in *IEEE International Symposium on Biomedical Imaging: From Nano to Macro*, 2011, pp. 956-959.
- C49 **M. Jorge Cardoso**, M. J. Clarkson, M. Modat, and S. Ourselin, "Longitudinal Cortical Thickness Estimation Using Khalimsky's Cubic Complex," in *Medical Image Computing and Computer-Assisted Intervention*, Berlin, 2011, vol. 6892, no. 57, pp. 467-475.
- C50 **M. Jorge Cardoso**, M. Modat, K. K. Leung, J. Barnes, and S. Ourselin, "Locally ranked STAPLE for template based segmentation propagation," in *MICCAI Grand Challenge and Workshop on Multi-Atlas Labeling*, 2011, vol. 25, pp. 25-26.
- C51 **M. Jorge Cardoso**, M. Modat, M. J. Clarkson, H. Talbot, M. Couprie, and S. Ourselin, "Topologically correct cortical segmentation using Khalimsky's cubic complex framework," in *SPIE Medical Imaging*, 2011.

- C52 M. Clarkson, M. Modat, **M. Jorge Cardoso**, G. Ridgway, K. Leung, J. Rohrer, S. Ourselin, and N. Fox, "A comparative study of voxel and surface-based cortical thickness methods in frontotemporal dementia," in IEEE International Symposium on Biomedical Imaging: From Nano to Macro, 2011, vol. 7, no. 4, p. S56.
- C53 M. J. Clarkson, **M. Jorge Cardoso**, M. Modat, G. R. Ridgway, K. K. Leung, J. D. Rohrer, N. C. Fox, and S. Ourselin, "Cross-sectional analysis using voxel or surface based cortical thickness methods: A comparison study," in IEEE International Symposium on Biomedical Imaging: From Nano to Macro, 2011, pp. 381-384.
- C54 P. Daga, G. Winston, M. Modat, **M. Jorge Cardoso**, J. Stretton, M. Symms, A. W. McEvoy, D. Hawkes, J. Duncan, and S. Ourselin, "Integrating structural and diffusion MR information for optic radiation localisation in focal epilepsy patients," in IEEE International Symposium on Biomedical Imaging: From Nano to Macro, 2011, pp. 353-356.
- C55 **M. Jorge Cardoso**, M. Modat, M. J. Clarkson, and S. Ourselin, "On the extraction of topologically correct thickness measurements using Khalimsky's cubic complex," in Information Processing for Medical Imaging, 2011, pp. 159-170.

2010

- C56 **M. Jorge Cardoso**, M. J. Clarkson, M. Modat, G. R. Ridgway, and S. Ourselin, "Locally weighted Markov random fields for cortical segmentation," in IEEE International Symposium on Biomedical Imaging: From Nano to Macro, 2010, pp. 956-959.
- C57 M. Modat, P. Daga, C. Micallef, L. Mancini, M. White, **M. Jorge Cardoso**, N. Kitchen, A. McEvoy, J. Thornton, T. Yousry, others, "Near real time brain shift estimation for interventional MRI suite," in High-Performance MICCAI, 2010.
- C58 S. Pedemonte, **M. Jorge Cardoso**, A. Bousse, C. Panagiotou, D. Kazantsev, S. R. Arridge, B. F. Hutton, and S. Ourselin, "Class conditional entropic prior for MRI enhanced SPECT reconstruction," in Nuclear Science Symposium Conference Record (NSS/MIC), 2010 IEEE, 2010, pp. 3292-3300.
- C59 T. Mertzaniidou, J. H. Hipwell, **M. Jorge Cardoso**, C. Tanner, S. Ourselin, and D. J. Hawkes, "X-ray Mammography - MRI Registration Using a Volume-Preserving Affine Transformation and an EM-MRF for Breast Tissue Classification," in IWDM, Berlin, 2010, vol. 6136, no. 4, pp. 23-30.

2009

- C60 **M. Jorge Cardoso**, M. J. Clarkson, G. R. Ridgway, M. Modat, N. C. Fox, and S. Ourselin, "Improved Maximum a Posteriori Cortical Segmentation by Iterative Relaxation of Priors," in Medical Image Computing and Computer-Assisted Intervention, Berlin, 2009, vol. 5762, no. 54, pp. 441-449.

CONFERENCE ABSTRACTS

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