

Martin Rajchl, PhD.

Curriculum Vitae

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EMPLOYMENT HISTORY

Imperial College London Imperial College Research Fellow, Depts. of Computing and Medicine <i>Learning clinically useful information from large-scale medical imaging data</i> Sponsors: P.M. Matthews, D. Rueckert	London, UK 08/2017 - present
Research Associate, Dept. of Computing <i>Machine learning, computer vision, medical image analysis</i> Advisor: D. Rueckert	10/2014 - 07/2017
King's College London Visiting Research Associate <i>Analysis of large-scale multi-modal imaging data for fetal anomaly detection</i> Advisor: R. Razavi	London, UK 12/2014 - 10/2016
Robarts Research Institute Affiliate Research Staff Graduate Researcher <i>Optimisation methods for rapid medical image segmentation</i> Advisor: T.M. Peters	London, CAN 09/2014 - 08/2016 10/2010 - 08/2014
Medical University of Vienna Research Assistant; Advisor: W. Birkfellner <i>Biomechanical properties of the oral mucosa</i>	Vienna, AUT 2010
Siemens Healthcare AG Working student; <i>RIS and PACS administration</i>	Vienna, AUT 2008-2010
Carl Reiner GmbH. R&D Engineer; <i>Algorithm development for superimposed high-frequency jet ventilation</i>	Vienna, AUT 2008

EDUCATION

Robarts Research Institute, Western University PhD, Biomedical Engineering Dissertation: <i>Rapid Segmentation Techniques for Cardiac and Neuroimage Analysis</i>	London, CAN 08/2014
UAS Technikum Wien MSc, Biomedical Engineering Sciences BSc, Biomedical Engineering	Vienna, AUT 05/2010 05/2008

TEACHING EXPERIENCE

Western University Graduate Teaching Assistant, <i>Advanced Medical Image Processing and Analysis</i> Graduate Teaching Assistant, <i>Programming Fundamentals for Engineers</i>	London, CAN 2013 - 2014 2011 - 2014
Robarts Research Institute Techn. advisor to clinical research staff, <i>Cardiovascular MRI Clinical Research Programme</i>	London, CAN 2012 - 2014

HONORS, AWARDS & ACADEMIC ACCOMPLISHMENTS

Winner of CTF at Transformationally Intelligent Technology Systems	2017
Imperial College Research Fellowship	2017
Winner of the Brain Tumor Segmentation Challenge (BraTs 2017) at MICCAI	2017

ERC Marie Skłodowska-Curie Actions Seal of Excellence	2016
Fellow of the CIHR Strategic Training Program in Vascular Research	2013
Awarded Success with Good Honors at Master's thesis defense	2010
Awarded Success with Distinction at Bachelor's thesis defense	2008

SCHOLARSHIPS, FELLOWSHIPS & FUNDING OPPORTUNITIES

Imperial College Research Fellowship (GBP £230000)	2017 - 2021
EPSRC ICT (EP/N024494/1), Role: Named Researcher (GBP £125000)	2017 - 2018
Western Graduate Research Scholarship (CAD \$17500/yr)	2010 - 2014
CIHR Strategic Training Program in Vascular Research (CAD \$12000/yr)	2011 - 2012

Oral Presentations & Invited Talks

WBIR, IEEE Computer Vision and Patter Recognition, Las Vegas, USA	2016
Center for Biomedical Engineering and Medical Physics, Medical University Vienna, AUT	2015
Energy minimization in Computer Vision and Pattern Recognition, Hong Kong, CHN	2015
Computational Imaging Research Lab, Medical University Vienna, AUT	2014
Robarts Research MedIA Series, London, CAN.	2013
Department of Computing, Imperial College London, UK	2012
SPIE Medical Imaging, San Diego, USA	2012
IEEE International Symposium on Biomedical Imaging, Barcelona, ESP	2012
Canadian Cardiovascular Congress, Toronto, CAN	2012

Poster Presentations

Bayesian Deep Learning Workshop, NIPS, Long Beach, USA	2017
Medical Imaging meets NIPS, NIPS, Long Beach, USA	2017
SPIE Medical Imaging, San Diego, USA	2014
Imaging Network Ontario (IMNO), Toronto, CAN	2014
London Health Research Day, London, CAN	2014
IEEE Conf. on Computer Vision and Pattern Recognition (CVPR), Portland, USA	2013
Imaging Network Ontario (IMNO), Toronto, CAN	2013
London Imaging Discovery (LID), London, CAN	2013
Intl. Conf. on MICCAI, Nice, FRA	2012
Imaging Network Ontario (IMNO), Toronto, CAN	2012
London Imaging Discovery (LID), London, CAN	2012

Scientific Review Boards

Natural Sciences and Engineering Research Council of Canada (NSERC), IEEE Transaction on Medical Imaging, Medical Image Analysis, Medical Physics, International Journal of Computer-Assisted Radiology and Surgery, Journal of Medical Imaging, IEEE Canadian Journal of Electrical and Computer Engineering, Medical Image Computing and Computer Assisted Interventions, Computer Methods and Programs in Biomedicine, IOP Measurement Science and Technology

Programme Committee Memberships

MICCAI Workshop on Whole-Heart and Great Vessel Segmentation from 3D Cardiovascular MRI in Congenital Heart Disease	2016
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Professional Associations and Scientific Societies

Institute of Electrical and Electronics Engineers (IEEE)
 Medical Image Computing and Computer Assisted Interventions (MICCAI) Society
 International Society of Optical Engineers (SPIE)

Industrial Collaborations

Philips Healthcare, Eindhoven, NL	2014 - 2016
Neochord Inc., Eden Prairie, MN, USA	2012 - 2014
Medtronic Inc., Fridley, MN, USA	2012 - 2013
MedVoxel Systems, Vancouver, BC, CAN	2012
Carl Reiner Ltd., Vienna, AUT	2007 - 2008

Open Source Software

DLTK (Deep Learning Tool Kit for Medical Imaging) dltk.github.io	Founder
ASETS (Advanced Segmentation Tools) www.advancedsegmentationtools.org	Founder
Multi-atlas graph labelling www.github.com/lmkoch/multi-atlas-graph-labelling	Contributor

Publications

IF = ISI Impact Factor. ★ denotes top ranked journals in the upper 20% of the respective ISI list. If the IF is not yet available for this year, the most recent is stated.

Articles in Submission

1. Ktena, S. I., S. Parisot, E. Ferrante, **M. Rajchl**, M. C. Lee, B. Glocker, and D. Rueckert (2018). Metric Learning with Spectral Graph Convolutions on Brain Connectivity Networks. *Neuroimage*, [Submitted]. **IF: 5.835★**.
2. Bai, W., M. Sinclair, G. Tarroni, O. Oktay, **M. Rajchl**, G. Vaillant, A. M. Lee, N. Aung, M. M. Sanghvi, F. Zemrak, K. Fung, J. M. Paiva, E. Lukaschuk, V. Carapella, Y. J. Kim, H. Suzuki, B. Kainz, P. M. Matthews, S. E. Petersen, S. K. Piechnik, S. Neubauer, B. Glocker, and D. Rueckert (2017). Human-level CMR image analysis with deep fully convolutional networks. *Journal of Cardiovascular Magnetic Resonance*, [Submitted]. **IF: 5.601★**.
3. Biffi, C., O. Oktay, W. Bai, G. Tarroni, A. D. Marvao, **M. Rajchl**, S. A. Cook, D. O'Regan, and D. Rueckert (2018). Detection of disease-specific remodelling patterns in cardiovascular disease using Deep Learning and cardiac MRI. *ISMRM 2018*, [Submitted].

Peer-reviewed Journal Articles

1. **Rajchl M.**, M. C. Lee, O. Oktay, K. Kamnitsas, J. Passerat-Palmbach, W. Bai, M. Damodaram, M. A. Rutherford, J. V. Hajnal, B. Kainz, and D. Rueckert (2017). DeepCut: Object Segmentation from Bounding Box Annotations using Convolutional Neural Networks. *IEEE Transactions on Medical Imaging* **36**(2), 674–683, **IF: 3.39★**.
2. Koch, L., **M. Rajchl**, W. Bai, C. Baumgartner, T. Tong, J. Passerat-Palmbach, P. Aljabar, and D. Rueckert (2017). Multi-Atlas Segmentation using Partially Annotated Data: Methods and Annotation Strategies. *IEEE Transactions on Pattern Recognition and Machine Intelligence*, [Accepted]. **IF: 8.33★**.
3. Alansary, A., B. Kainz, **M. Rajchl**, M. Murgasova, M. Damodaram, D. F. Lloyd, A. Davidson, S. G. McDonagh, M. Rutherford, J. V. Hajnal, and D. Rueckert (2017). PVR: Patch-to-Volume Reconstruction for Large Area Motion Correction of Fetal MRI. *IEEE Transactions on Medical Imaging*, **IF: 3.39★**.
4. Baxter, J., **M. Rajchl**, A. McLeod, J. Yuan, and T. Peters (2017). Directed Acyclic Graph Continuous Max-Flow Image Image Segmentation for Unconstrained Label Orderings. *International Journal of Computer Vision*, 1–20, **IF: 8.22★**.
5. Morant, K., Y. Mikami, I. Nevis, D. McCarty, J. Stirrat, D. Scholl, **M. Rajchl**, P. Giannoccaro, L. Kolman, B. Heydari, C. Lydell, A. Howarth, A. Grant, and J. White (2017). Contribution of Mitral Valve Leaflet Length and Septal Wall Thickness to Outflow Tract Obstruction in Patients with Hypertrophic Cardiomyopathy. *The International Journal of Cardiovascular Imaging*, **IF: 1.81**.
6. **Rajchl M.**, J. Baxter, A. McLeod, J. Yuan, W. Qiu, T. Peters, and A. Khan (2016). Hierarchical Max-Flow Segmentation Framework For Multi-Atlas Segmentation with Kohonen Self-Organizing Map Based Gaussian Mixture Modeling. *Medical Image Analysis* **27**, 45–56, **IF: 3.65★**.
7. Oktay, O., W. Bai, **M. Rajchl**, M. Heinrich, B. Glocker, and D. Rueckert (2016). Stratified Decision Forests for Accurate Anatomical Landmark Localization. *IEEE Transactions on Medical Imaging*, [Accepted]. **IF: 3.39★**.
8. Baxter, J., **M. Rajchl**, T. M. Peters, and E. C. Chen (2016). Optimization-Based Interactive Segmentation Interface for Multi-Region Problems. *Journal of Medical Imaging*, [Accepted]. **IF: N/A**.
9. Kolman, L., D. G. Welsh, E. Vigmond, S. X. Joncas, J. Stirrat, D. Scholl, **M. Rajchl**, E. Tweedie, Y. Mikami, C. Lydell, A. Howarth, R. Yee, and J. A. White (2016). Abnormal Lymphatic Channels Detected by T2-weighted MRI. *Journal of the American College of Cardiology: Cardiovascular Imaging*, [Accepted]. **IF: 7.19★**.
10. Mendrik, A. M., K. L. Vincken, H. J. Kuijf, M. Breeuwer, W. Bouvy, J. de Bresser, A. Alansary, M. de Bruijne, A. Carass, A. El-Baz, A. Jog, R. Katyal, A. R. Khan, F. van der Lijn, Q. Mahmood, R. Mukherjee, A. van Opbroek, S. Paneri, S. Pereira, M. Persson, **M. Rajchl**, D. Sarikaya, S. Oerjan, C. A. Silva, H. A. Vrooman, S. Vyas, C. Wang, L. Zhao, G. J. Biessels, and M. A. Viergever (2015). MRBrainS Challenge: Online Evaluation Framework for Brain Image Segmentation in 3T MRI Scans. *Computational Intelligence and Neuroscience*, **IF: 0.48**.
11. Ukwatta, E., J. Yuan, **M. Rajchl**, W. Qiu, B. Chiu, and A. Fenster (2015). Joint Segmentation of Lumen and Outer Wall from 3D Femoral Artery MR Images: Towards 3D Phenotypes of Peripheral Arterial Disease. *Medical Image Analysis* **26**(1), 120–132, **IF: 3.65★**.

12. Qiu, W., J. Yuan, **M. Rajchl**, J. Kishimoto, E. Ukwatta, Y. Chen, S. de Ribaupierre, B. Chiu, and A. Fenster (2015). 3D MR Ventricle Segmentation in Pre-Term Infants with Post-Hemorrhagic Ventricle Dilatation (PHVD) Using Multi-Phase Geodesic Level-Sets. *Neuroimage* **118**, 13–25, **IF: 6.36★**.
13. Ukwatta, E., H. Arevalo, **M. Rajchl**, J. A. White, F. Pashakhanloo, A. Prakosa, D. A. Herzka, E. McVeigh, A. C. Lardo, N. A. Trayanova, and F. Vadakkumpadan (2015). Image-based Reconstruction of Three-dimensional Myocardial Infarct Geometry for Patient-Specific Modeling of Cardiac Electrophysiology. *Medical Physics* **42**(8), 4579–4590, **IF: 2.64**.
14. Guo, F., J. Yuan, **M. Rajchl**, S. Svenningsen, D. Cipaldi, K. Sheikh, A. Fenster, and G. Parraga (2015). Globally Optimal Co-Segmentation of Three-dimensional Pulmonary 1H and Hyperpolarized 3He MRI with Spatial Consistency Prior. *Medical Image Analysis* **23**(1), 43–55, **IF: 3.65★**.
15. Li, F. P., **M. Rajchl**, J. White, A. Goela, and T. Peters (2015). Ultrasound Guidance for Beating Heart Mitral Valve Repair Augmented by Synthetic Dynamic CT. *IEEE Transactions on Medical Imaging* **34**(10), 2025 – 2035, **IF: 3.39★**.
16. Sun, Y., J. Yuan, W. Qiu, **M. Rajchl**, C. Romagnoli, and A. Fenster (2015). Three-Dimensional Non-Rigid MR-TRUS Registration Using Dual Optimization. *IEEE Transactions on Medical Imaging* **34**(5), 1085 –1095, **IF: 3.39★**.
17. Li, F. P., **M. Rajchl**, J. T. Moore, and T. M. Peters (2015). A Mitral Annulus Tracking Approach for Navigation of Off-pump Beating Heart Mitral Valve Repair. *Medical Physics* **42**(1), 456–468, **IF: 2.64**.
18. Petitjean, C., M. A. Zuluaga, W. Bai, J.-N. Dacher, D. Grosgeorge, J. Caudron, S. Ruana, I. Ben-Ayed, M. J. Cardoso, H.-C. Cheng, D. Jimenez-Carretero, M. J. Ledesma-Carbayo, C. Davatzikos, J. Doshi, G. Erus, O. M. Maier, C. M. Nambakhsh, Y. Ou, S. Ourselin, C.-W. Peng, N. S. Peters, T. M. Peters, **M. Rajchl**, D. Rueckert, A. Santos, W. Shi, C.-W. Wang, H. Wang, and J. Yuan (2015). Right Ventricle Segmentation From Cardiac MRI: A Collation Study. *Medical Image Analysis* **19**(1), 187–202, **IF: 3.65★**.
19. **Rajchl M.**, J. Stirrat, M. Goubran, J. Yu, D. Scholl, T.M.Peters, and J. White (2014). Comparison of Semi-automated Scar Quantification Techniques Using High-Resolution, 3-Dimensional Late-Gadolinium-Enhancement Magnetic Resonance Imaging. *The International Journal of Cardiovascular Imaging* **31**, 349–357, **IF: 1.81**.
20. Mikami, Y., L. Kolman, S. X. Joncas, J. Stirrat, D. Scholl, **M. Rajchl**, C. Lydell, S. Weeks, A. Howarth, and J. A. White (2014). Accuracy and Reproducibility of Semi-automated Late Gadolinium Enhancement Quantification Techniques in Patients with Hypertrophic Cardiomyopathy. *Journal of Cardiovascular Magnetic Resonance* **16** (85), **IF: 4.56★**.
21. Stirrat, J., **M. Rajchl**, L. Bergin, T. Peters, and J. White (2014). 3-Dimensional Late Gadolinium Enhancement Scar Imaging for Surgically Corrected Tetralogy of Fallot: Clinical Feasibility of Scar Segmentation. *Journal of Cardiovascular Magnetic Resonance* **16** (76), **IF: 4.56★**.
22. Laksman, Z., R. Yee, J. Stirrat, L. J. Gula, A. C. Skanes, P. Leong-Sit, J. Manlucu, D. McCarty, Y. Turkistsani, D. Scholl, **M. Rajchl**, A. Goela, A. Islam, R. T. Thompson, M. Drangova, and J. A. White (2014). Model-based Navigation of Left and Right Ventricular Leads to Optimal Targets for Cardiac Resynchronization Therapy: A Single Center Feasibility Study. *Circulation: Arrhythmia and Electrophysiology* **7**, 1040–1047, **IF: 4.51★**.
23. **Rajchl M.**, J. Yuan, J. White, E. Ukwatta, J. Stirrat, C. Nambakhsh, F. Li, and T. Peters (2014). Interactive Hierarchical Max-Flow Segmentation of Scar Tissue from Late-Enhancement Cardiac MR Images. *IEEE Transactions on Medical Imaging* **33**(1), 159–172, **IF: 3.39★**.
24. Qiu, W., J. Yuan, E. Ukwatta, Y. Sun, **Rajchl M.**, and A. Fenster (2014). Dual Optimization Based Prostate Zonal Segmentation in 3D MR Images. *Medical Image Analysis* **18**(4), 660–673, **IF: 3.65★**.
25. Qiu, W., J. Yuan, E. Ukwatta, Y. Sun, **Rajchl M.**, and A. Fenster (2014). Prostate Segmentation: An Efficient Convex Optimization Approach with Axial Symmetry Using 3D TRUS and MR Images. *IEEE Transactions on Medical Imaging* **33**(4), 947–960, **IF: 3.39★**.
26. White, J. A., **Rajchl M.**, J. Butler, R. T. Thompson, F. S. Prato, and G. Wisenberg (2013). Active Cardiac Sarcoidosis: First Clinical Experience of Simultaneous Positron Emission Tomography–Magnetic Resonance Imaging for the Diagnosis of Cardiac Disease. *Circulation* **127**(22), e639–e641, **IF: 14.95★**.
27. Nambakhsh, C., J. Yuan, K. Punithakumar, A. Goela, **M. Rajchl**, T. M. Peters, and I. B. Ayed (2013). Left Ventricle Segmentation in MRI via Convex Relaxed Distribution Matching. *Medical Image Analysis* **17**(8), 1010–1024, **IF: 3.68★**.
28. Ukwatta, E., J. Yuan, **M. Rajchl**, W. Qiu, D. Tessier, and A. Fenster (2013). 3D Carotid Multi-Region MRI Segmentation by Globally Optimal Evolution of Coupled Surfaces. *IEEE Transactions on Medical Imaging* **32**(4), 770–785, **IF: 3.79★**.

29. Moore, J. T., M. W. A. Chu, B. Kiaii, D. Bainbridge, G. Guiraudon, C. Wedlake, M. Currie, **M. Rajchl**, R. V. Patel, and T. M. Peters (2013). A navigation platform for guidance of beating heart transapical mitral valve repair. *IEEE Transactions on Biomedical Engineering* **60**(4), 1034–1040, **IF: 2.23**.
30. Chu, M. W., J. Moore, T. Peters, D. Bainbridge, D. McCarty, G. M. Guiraudon, C. Wedlake, P. Lang, **M. Rajchl**, M. E. Currie, et al. (2012). Augmented Reality Image Guidance Improves Navigation for Beating Heart Mitral Valve Repair. *Innovations: Technology and Techniques in Cardiothoracic and Vascular Surgery* **7**(4), 274–281, **IF: N/A**.

Peer-reviewed Articles in Conference Proceedings¹

1. Ktena, S. I., S. Parisot, E. Ferrante, **M. Rajchl**, M. C. H. Lee, B. Glocker, and D. Rueckert (2017). Distance Metric Learning Using Graph Convolutional Networks: Application to Functional Brain Networks. In: *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2017*, pp.469–477.
2. Bai, W., O. Oktay, M. Sinclair, H. Suzuki, **M. Rajchl**, G. Tarroni, B. Glocker, A. King, P. M. Matthews, and D. Rueckert (2017). Semi-supervised Learning for Network-Based Cardiac MR Image Segmentation. In: *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2017*, pp.253–260.
3. **Rajchl M.**, J. S. Baxter, W. Qiu, A. R. Khan, A. Fenster, T. M. Peters, D. Rueckert, and J. Yuan (2016). Fast Deformable Image Registration With Non-Smooth Dual Optimization. In: *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition Workshops*, pp.25–32.
4. Robinson, E. C., B. Glocker, **M. Rajchl**, and D. Rueckert (2016). Discrete Optimisation for Group-Wise Cortical Surface Atlasing. In: *Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition Workshops*.
5. Baxter, J. S., **M. Rajchl**, J. Yuan, and T. M. Peters (2015). “Directed Acyclic Graph Continuous Max-Flow Image Segmentation for Unconstrained Label Orderings”. In: *Bayesian and Graphical Models for Biomedical Imaging – BAMBI 2015*.
6. Qiu, W., J. Yuan, J. Kishimoto, **M. Rajchl**, E. Ukwatta, S. de Ribaupierre, and A. Fenster (2015). “Longitudinal Analysis of Pre-Term Neonatal Ventricle in Ultrasound Images Based on Convex Optimization”. In: *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2015*. **Oral Presentation.**, pp.476–483 **AR = 32.5%**.
7. Qiu, W., J. Yuan, J. Kishimoto, Y. Chen, **M. Rajchl**, E. Ukwatta, S. de Ribaupierre, and A. Fenster (2015). “Automatic 3D US Ventricle Segmentation in Pre-term Neonates Using Multi-Phase Geodesic Level-Sets with Shape Prior”. In: *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2015*, pp.89–96 **AR = 32.5%**.
8. Parisot, S., **M. Rajchl**, J. Passerat-Palmbach, and D. Rueckert (2015). “A Continuous Flow-Maximization Approach to Connectivity-driven Cortex Parcellation”. In: *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2015*, pp.165–172 **AR = 32.5%**.
9. Oktay, O., A. Schuh, **M. Rajchl**, K. Keraudren, A. Gomez, M. P. Heinrich, G. Penney, and D. Rueckert (2015). “Structured Decision Forests For Multi-modal Ultrasound Image Registration”. In: *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2015*, pp.363–371 **AR = 32.5%**.
10. Koch, L. M., **M. Rajchl**, T. Tong, J. Passerat-Palmbach, P. Aljabar, and D. Rueckert (2015). “Multi-Atlas Segmentation as a Graph Labelling Problem: Application to Partially Annotated Atlas Data”. In: *Information Processing in Medical Imaging (IPMI)*. **Oral Presentation.**, pp.221–232.
11. Baxter, J. S., **M. Rajchl**, T. M. Peters, and E. C. Chen (2015). Optimization-Based Interactive Segmentation Interface for Multi-Region Problems. In: *SPIE Medical Imaging*, pp.94133T–94133T–8.
12. Ukwatta, E., **M. Rajchl**, J. A. White, F. Pashakhanloo, H. Daniel, E. McVeigh, A. C. Lardo, N. Trayanova, and F. Vadakkumpadan (2015). Image-based Reconstruction of 3D Myocardial Infarct Geometry for Patient Specific Applications. In: *SPIE Medical Imaging*, pp.94132W–94132W–7. **Oral Presentation.**
13. Guo, F., S. Svenningsen, E. Bluemke, **M. Rajchl**, J. Yuan, A. Fenster, and G. Parraga (2015). Automated Pulmonary Lobar Ventilation Measurements Using Volume-matched Thoracic CT and MRI. In: *SPIE Medical Imaging*, pp.941717–941717–9. **Oral Presentation.**
14. **Rajchl M.**, J. S. Baxter, E. Bae, X.-C. Tai, A. Fenster, T. M. Peters, and J. Yuan (2015). “Variational Time-Implicit Multiphase Level-Sets: A Fast Convex Optimization-Based Solution”. In: *Energy Minimization Methods in Computer Vision and Pattern Recognition*. Springer Berlin Heidelberg, pp.278–291. **Oral Presentation.**

¹All manuscripts consist of full-length, 8+ page papers that undergo double-blinded peer-review by 3-7 experts in the field, with highly competitive acceptance rates (AR), which are stated, where available. Top Conferences, such as MICCAI, IPMI or CVPR, have lower acceptance rates than many top journals.

15. Qiu, W., **M. Rajchl**, F. Guo, Y. Sun, E. Ukwatta, A. Fenster, and J. Yuan (2014). “3D Prostate TRUS Segmentation Using Globally Optimized Volume-Preserving Prior”. In: *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2014*. Springer Berlin Heidelberg, pp.796–803 **AR = 29%**.
16. **Rajchl M.**, K. Abhari, J. Stirrat, E. Ukwatta, D. Cantor-Rivera, F. P. Li, T. M. Peters, and J. A. White (2014). Distribution of guidance models for cardiac resynchronization therapy in the setting of multi-center clinical trials. In: *SPIE Medical Imaging*. International Society for Optics and Photonics, pp.90361V–90361V–7.
17. Baxter, J. S., **M. Rajchl**, A. J. McLeod, A. R. Khan, J. Yuan, and T. M. Peters (2014). Smoothness parameter tuning for generalized hierarchical continuous max-flow segmentation. In: *SPIE Medical Imaging*. International Society for Optics and Photonics, pp.903410–903410–8.
18. Li, F. P., **M. Rajchl**, J. T. Moore, and T. M. Peters (2014). Ultrasound based mitral valve annulus tracking for off-pump beating heart mitral valve repair. In: *SPIE Medical Imaging*. International Society for Optics and Photonics, pp.90361M–90361M–9.
19. Inoue, J., A. C. Skanes, J. A. White, **M. Rajchl**, and M. Drangova (2014). Patient-specific left atrial wall-thickness measurement and visualization for radiofrequency ablation. In: *SPIE Medical Imaging*. International Society for Optics and Photonics, pp.90361N–90361N–6.
20. Li, F., **M. Rajchl**, J. A. White, A. Goela, and T. M. Peters (2013). “Towards CT Enhanced Ultrasound Guidance for Off-pump Beating Heart Mitral Valve Repair”. In: *MIAR/AE-CAI*. Springer Berlin Heidelberg, pp.136–143. **Oral Presentation.**
21. Yuan, J., E. Ukwatta, W. Qiu, **M. Rajchl**, Y. Sun, X.-C. Tai, and A. Fenster (2013). “Jointly Segmenting Prostate Zones in 3D MRIs by Globally Optimized Coupled Level-Sets”. In: *Energy Minimization Methods in Computer Vision and Pattern Recognition*. Springer Berlin Heidelberg, pp.12–25. **Oral Presentation.**
22. Sun, Y., J. Yuan, **M. Rajchl**, W. Qiu, C. Romagnoli, and A. Fenster (2013). “Efficient Convex Optimization Approach to 3D Non-rigid MR-TRUS Registration”. In: *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2013*. Springer Berlin Heidelberg, pp.195–202 **AR = 33.2%**.
23. Qiu, W., J. Yuan, E. Ukwatta, Y. Sun, **M. Rajchl**, and A. Fenster (2013). “Fast Globally Optimal Segmentation of 3D Prostate MRI with Axial Symmetry Prior”. In: *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2013*. Springer Berlin Heidelberg, pp.198–205 **AR = 33.2%**.
24. Ukwatta, E., J. Yuan, W. Qiu, **M. Rajchl**, B. Chiu, S. Shavakh, J. Xu, and A. Fenster (2013). “Joint Segmentation of 3D Femoral Lumen and Outer Wall Surfaces from MR Images”. In: *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2013*. Springer Berlin Heidelberg, pp.534–541 **AR = 33.2%**.
25. Yuan, J., W. Qiu, **M. Rajchl**, E. Ukwatta, X.-C. Tai, and A. Fenster (2013). Efficient 3D Endfiring TRUS Prostate Segmentation with Globally Optimized Rotational Symmetry. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2211–2218 **AR = 26.2%**.
26. Qiu, W., J. Yuan, E. Ukwatta, **M. Rajchl**, S. Yue, and A. Fenster (2013). “Efficient 3D Multi-Region Prostate MRI Segmentation using Dual Optimization”. In: *Information Processing in Medical Imaging (IMPI)*. Springer Berlin Heidelberg, pp.304–315 **AR = 13%**.
27. Li, F., **M. Rajchl**, J. White, A. Goela, and T. Peters (2013). “Generation of Synthetic 4D Cardiac CT Images for Guidance of Minimally Invasive Beating Heart Interventions”. In: *Information Processing in Computer-Assisted Interventions*. Springer Berlin Heidelberg, pp.11–20. **Oral Presentation.**
28. Li, F., J. A. White, **M. Rajchl**, A. Goela, and T. M. Peters (2013). “Generation of Synthetic 4D Cardiac CT Images by Deformation from Cardiac Ultrasound”. In: *Augmented Environments for Computer-Assisted Interventions*. Springer Berlin Heidelberg, pp.132–141. **Oral Presentation.**
29. Ukwatta, E., J. Yuan, W. Qiu, **M. Rajchl**, and A. Fenster (2013). Efficient convex optimization-based curvature dependent contour evolution approach for medical image segmentation. In: *SPIE Medical Imaging*. International Society for Optics and Photonics, pp.866902–866902. **Oral Presentation.**
30. **Rajchl M.**, J. Yuan, J. White, E. Ukwatta, M. Nambakhsh, J. Stirrat, and T. Peters (2012). “A Fast Convex Optimization Approach to Segmenting 3D Scar Tissue from Delayed-Enhancement Cardiac MR Images”. In: *Medical Image Computing and Computer-Assisted Intervention–MICCAI 2012*. Springer Berlin Heidelberg, pp.659–666 **AR = 32%**.
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