**A survey of MRI-based medical image analysis for brain tumor studies**

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[Physics in Medicine and Biology](http://iopscience.iop.org/journal/0031-9155), [Volume 58](http://iopscience.iop.org/volume/0031-9155/58), [Number 13](http://iopscience.iop.org/issue/0031-9155/58/13)

Medical Image Segmentation:

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Brain Tumour Segmentation:

Brain tumor segmentation with Deep Neural Networks Original Research Article   
Pages 18-31 [Volume 35](http://www.sciencedirect.com/science/journal/13618415/35/supp/C), January 2017, Pages 18–31 MedIA 2017 Mohammad Havaei, Axel Davy, David Warde-Farley, Antoine Biard, Aaron Courville, Yoshua Bengio, Chris Pal, Pierre-Marc Jodoin, Hugo Larochelle

Paper entitle**"*Fully Automatic Segmentation of Brain Tumor Images Using Support Vector Machine Classification in Combination with Hierarchical Conditional Random Field Regularization”,***Stefan Bauer, Lutz Nolte, Mauricio Reyes *University of Bern, Switzerland*

[A deep learning model integrating FCNNs and CRFs for brain tumor segmentation](http://rt2-t.notifications.elsevier.com/r/?id=h41d4d28,42bc0c8,42bc0d9&p1=www.sciencedirect.com/science?_ob=GatewayURL&_method=citationSearch&_version=1&_piikey=S136184151730141X&_origin=RV_SD_TOC_EMAIL&dgcid=raven_sd_via_email" \t "_blank)  Original Research Article   
*Pages 98-111*  MEDIA [Volume 43](https://www-sciencedirect-com.proxy.lib.sfu.ca/science/journal/13618415/43/supp/C" \o "Go to table of contents for this volume/issue), January 2018  
Xiaomei Zhao, Yihong Wu, Guidong Song, Zhenye Li, Yazhuo Zhang, Yong Fan

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HeMIS: Hetero-Modal Image Segmentation

<http://arxiv.org/pdf/1607.05194.pdf>

Deep learning trends for focal brain pathology segmentation in MRI ⋆

Mohammad Havaei⋆⋆1, Nicolas Guizard2, Hugo Larochelle14 , and Pierre-Marc Jodoin13  
arXiv:1607.05258v1

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**Efficient Multi-Scale 3D CNN with Fully Connected CRF for Accurate Brain Lesion Segmentation**

[Konstantinos Kamnitsas](http://arxiv.org/find/cs/1/au:+Kamnitsas_K/0/1/0/all/0/1), [Christian Ledig](http://arxiv.org/find/cs/1/au:+Ledig_C/0/1/0/all/0/1), [Virginia F.J. Newcombe](http://arxiv.org/find/cs/1/au:+Newcombe_V/0/1/0/all/0/1), [Joanna P. Simpson](http://arxiv.org/find/cs/1/au:+Simpson_J/0/1/0/all/0/1), [Andrew D. Kane](http://arxiv.org/find/cs/1/au:+Kane_A/0/1/0/all/0/1), [David K. Menon](http://arxiv.org/find/cs/1/au:+Menon_D/0/1/0/all/0/1), [Daniel Rueckert](http://arxiv.org/find/cs/1/au:+Rueckert_D/0/1/0/all/0/1), [Ben Glocker](http://arxiv.org/find/cs/1/au:+Glocker_B/0/1/0/all/0/1)

**[arXiv:1603.05959](http://arxiv.org/abs/1603.05959) [cs.CV]**

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**Brain Tumor Segmentation using Convolutional Neural Networks in MRI Images.**

**[Pereira S](http://www.ncbi.nlm.nih.gov/pubmed/?term=Pereira%20S%5BAuthor%5D&cauthor=true&cauthor_uid=26960222), [Pinto A](http://www.ncbi.nlm.nih.gov/pubmed/?term=Pinto%20A%5BAuthor%5D&cauthor=true&cauthor_uid=26960222), [Alves V](http://www.ncbi.nlm.nih.gov/pubmed/?term=Alves%20V%5BAuthor%5D&cauthor=true&cauthor_uid=26960222), [Silva CA](http://www.ncbi.nlm.nih.gov/pubmed/?term=Silva%20CA%5BAuthor%5D&cauthor=true&cauthor_uid=26960222).**

**Thesis: [Automated Brain Lesion Detection and Segmentation Using Magnetic Resonance Images](http://scholarlyrepository.miami.edu/cgi/viewcontent.cgi?article=2434&context=oa_dissertations). [Nooshin Nabizadeh,](http://scholarlyrepository.miami.edu/do/search/?q=author_lname%3A%22Nabizadeh%22%20author_fname%3A%22Nooshin%22&start=0&context=1566314) *[University of Miami](http://scholarlyrepository.miami.edu/do/search/?q=author_lname%3A%22Nabizadeh%22%20author_fname%3A%22Nooshin%22&start=0&context=1566314)*.**

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**International Journal of Computer Science and Information Security (IJCSIS), Vol. 14, No. 4, April 2016**

**An Efficient Anti-noise Fast FCM clustering for Glioblastoma Multiforme Tumor segmentation**

**B. Srinivasa Rao & Dr. E. Sreenivas Reddy**

**<https://s3-eu-west-1.amazonaws.com/pfigshare-u-files/5201746/20Paper31031673IJCSISCameraReadyPaperApp.126133.pdf>**

**IEEE TRANSACTIONS ON MEDICAL IMAGING, VOL. 35, NO. 5, MAY 2016**

**Brain Tumor Segmentation Using Convolutional**

**Neural Networks in MRI Images Sérgio Pereira\*, Adriano Pinto, Victor Alves, and Carlos A. Silva\***

**[Expert Systems with Applications](http://www.sciencedirect.com.proxy.lib.sfu.ca/science/journal/09574174)**

**[Volume 56](http://www.sciencedirect.com.proxy.lib.sfu.ca/science/journal/09574174/56/supp/C), 1 September 2016, Pages 59–68**

**Active contours driven by Cuckoo Search strategy for brain tumour images segmentation**

* **Elisee Ilunga-Mbuyambaa, , Jorge Mario Cruz-Duartea, , Juan Gabriel Avina-Cervantes, a, , Carlos Rodrigo Correa-Celyb, , Dirk Lindnerc, , Claire Chalopind,**
* **[doi:10.1016/j.eswa.2016.02.048](http://dx.doi.org/10.1016/j.eswa.2016.02.048)**

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MICCAI MRBrainS Segmentation Challenge**

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**2) “Efficient multi-scale 3D CNN with fully connected CRF for accurate brain lesion segmentation”, Kamnitsas, et. al., arXiv:submit/1511713 [cs.CV] 18 Mar 2016**

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Brain Image Classification:

Learning from Small Amounts of Labeled Data in a Brain Tumor Classification Task

Michael Goetz, Bram Stieltjes, Christian Weber, Klaus Maier-Hein

<http://www.cims.nyu.edu/~munoz/multitask/Paper_9_nips2014-Workshop-Final.pdf>

Round Randomized Learning Vector Quantization for Brain Tumor Imaging

<http://www.hindawi.com/journals/cmmm/2016/8603609/ref/>

Master's Thesis

Author Paul, Justin Stuart

Deep Learning for Brain Tumor Classification

Degree Master of Science

<http://etd.library.vanderbilt.edu/available/etd-04112016-224926/>

ATLAS:

PLOS ONE: A Probabilistic Atlas of Diffuse WHO Grade II Glioma Locations in the Brain

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