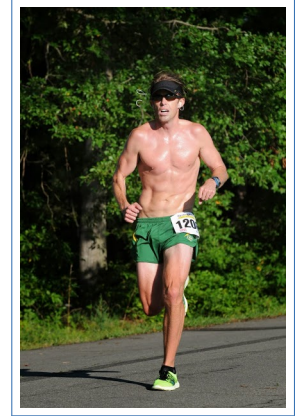


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Curriculum Vitae

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Education

- 2004 **D.Sc. Biomedical Engineering**, Washington University in St. Louis, St. Louis, MO.
Thesis: *Biventricular Myocardial Strains With Anatomical NURBS Models From Tagged MRI*
- 2000 **M.S. Biomedical Engineering**, University of Virginia, Charlottesville, VA.
Thesis: *Quantification Methods for Assessing Asthma in Hyperpolarized ^3He Lung MRI Studies*
- 1998 **B.S. Applied Physics: Computer Science**, Brigham Young University, Provo, UT.

Professional Appointments

- 2010– **Assistant Professor of Radiology**, University of Virginia, Charlottesville, VA.
- 2005–2010 **Senior Research Investigator**, University of Pennsylvania, Philadelphia, PA.
- 2004–2005 **Research Fellow in Radiology**, University of Pennsylvania, Philadelphia, PA.

Awards

Academic Service

Program committees

- 2012–present **SPIE Medical Imaging**.

Editorships

- 2012–present **Frontiers Review Editorial Board**.
- May 2013– **Frontiers in Neuroinformatics: Guest Editor**, *Neuroinformatics with the Insight ToolKit*.

Reviewer Duties

Academic Radiology
Annals of Biomedical Engineering
Computers in Biology and Medicine
Computers in Medical Imaging and Graphics
Focused Ultrasound Foundation ad hoc grant reviewer
Image and Vision Computing
International Journal of Pattern Recognition and Artificial Intelligence
IEEE Transactions on Medical Imaging
IEEE Transactions on Pattern Analysis and Machine Intelligence
IEEE Transactions on Biomedical Engineering
Insight Journal
International Conf. on Medical Image Computing and Computer Assisted Intervention
International Journal of Biomedical Imaging
International Journal of Computer Vision
International Workshop on Medical Imaging and Augmented Reality
IEEE International Symposium on Biomedical Imaging: From Nano to Macro
Journal of Computed Tomography
Journal of Electronic Imaging
Journal of Magnetic Resonance Imaging
Journal of Neurotrauma
Journal of the Optical Society of America A
Magnetic Resonance in Medicine
Medical Physics
Medical Image Analysis
Neuroradiology
Respirology

Computer skills

Languages C++, perl, bash, L^AT_EX, R
Tools and Libraries ITK, VTK, Paraview, git, Matlab

Interests

Running 1:26:38 half marathon (2013), 18:40 5k (2013)
Reading philosophy, history

Languages

Spanish **fluent**

Lived in Argentina

Publications

Articles

Brian B. Avants, Nicholas J. Tustison, and James C. Gee. The insight toolkit image registration framework: 2013. *Frontiers in Neuroinformatics*, submitted.

N. J. Tustison, Philip A. Cook, Gang Song, Sandhitsu R. Das, Jeffrey T. Duda, Benjamin M.

Kandel, Niels van Strien, James R. Stone, James C. Gee, and Brian B. Avants. Large-scale cortical thickness quantification with advanced normalization tools (ants). *NeuroImage*, submitted.

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Nicholas J. Tustison, Benjamin Contrella, Talissa A. Altes, Brian B. Avants, Eduard E. de Lange, and John P. Mugler III. Voxel-based longitudinal analysis of pulmonary ventilation mri. *Journal of Magnetic Resonance Imaging*, submitted.

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Nicholas J Tustison, Hans J Johnson, Torsten Rohlfing, Arno Klein, Satrajit S Ghosh, Luis Ibanez, and Brian B Avants. Instrumentation bias in the use and evaluation of scientific software: recommendations for reproducible practices in the computational sciences. *Front Neurosci*, 7:162, 2013.

Nicholas J Tustison, Brian B Avants, Philip A Cook, Junghoon Kim, John Whyte, James C Gee, and James R Stone. Logical circularity in voxel-based analysis: Normalization strategy may induce statistical bias. *Hum Brain Mapp*, Nov 2012.

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Brian B Avants, Nicholas J Tustison, Jue Wu, Philip A Cook, and James C Gee. An open source multivariate framework for n -tissue segmentation with evaluation on public data. *Neuroinformatics*, 9(4):381–400, Dec 2011.

Keelin Murphy, Bram van Ginneken, Joseph M Reinhardt, Sven Kabus, Kai Ding, Xiang Deng, Kunlin Cao, Kaifang Du, Gary E Christensen, Vincent Garcia, Tom Vercauteren, Nicholas Ayache, Olivier Commowick, Grégoire Malandain, Ben Glocker, Nikos Paragios, Nassir Navab, Vladlena Gorbunova, Jon Sporring, Marleen de Bruijne, Xiao Han, Matthias P Heinrich, Julia A Schnabel, Mark Jenkinson, Cristian Lorenz, Marc Modat, Jamie R McClelland, Sébastien Ourselin, Sascha E A Muenzing, Max A Viergever, Dante De Nigris, D Louis Collins, Tal Arbel, Marta Peroni, Rui Li, Gregory C Sharp, Alexander Schmidt-Richberg, Jan Ehrhardt, René Werner, Dirk Smeets, Dirk Loeckx, Gang Song, Nicholas Tustison, Brian Avants, James C Gee, Marius Staring, Stefan Klein, Berend C Stoel, Martin Urschler, Manuel Werlberger, Jef Vandemeulebroucke, Simon Rit, David Sarrut, and Josien P W Pluim. Evaluation of registration methods on thoracic CT: the EMPIRE10 challenge. *IEEE Trans Med Imaging*, 30(11):1901–20, Nov 2011.

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Marcelo Siqueira, Longin J. Latecki, Nicholas J. Tustison, J. Gallier, and James C. Gee. Topological repairing of 3d digital images. *Journal of Mathematical Imaging and Vision*, 30(3):249–274, March 2008.

N. J. Tustison and A. A. Amini. *Parametric and Geometric Deformable Models: An Application in Biomaterials and Medical Imagery*, volume 2, chapter Analysis of 4-D Cardiac MR Data with NURBS Deformable Models: Temporal Fitting Strategy and Nonrigid Registration. Springer, May 2007.

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Nicholas J Tustison, Victor G Dávila-Román, and Amir A Amini. Myocardial kinematics from tagged MRI based on a 4-D B-spline model. *IEEE Trans Biomed Eng*, 50(8):1038–40, Aug 2003.

K D Hagspiel, T A Altes, J P Mugler, 3rd, M J Spellman, Jr, J F Mata, N J Tustison, and J R Brookeman. MR virtual colonography using hyperpolarized (3)He as an endoluminal contrast agent: demonstration of feasibility. *Magn Reson Med*, 44(5):813–6, Nov 2000.

Conference Publications

Nicholas J. Tustison, Max Wintermark, Christopher Durst, and Brian B. Avants. Ants and Árboles. In *Proceedings of NCI-MICCAI BRATS 2013*, pages 47–50, September 2013.

C. Durst, P. Raghavan, N. Tustison, J. Patrie, A. Cupino, W. Xin, and M. Wintermark. Multiparametric imaging model to accurately predict extent of invasion of high-grade gliomas. In *Proceedings of ASNR*, 2013.

N. J. Tustison, A. Muratore, B. Contrella, J. P. Mugler III, E. E. de Lange, and T. A. Altes. Voxelwise comparison of hyperpolarized he-3 and xe-129 lung ventilation mr imaging in cystic fibrosis. In *Proceedings of the 21st Annual Meeting of the International Society for Magnetic Resonance in Medicine (ISMRM)*, 2013.

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References

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