**Biomedical Imaging Research Group**

Individual faculty profile

Name:

Nicholas J. Tustison

Rank/Title:

Associate Professor

School / Department:

Radiology and Medical Imaging

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Laboratory web site: *(if applicable)*

Research summary (1-2 paragraphs):

*May also include example images related to research. Please attach as separate files.*

In summary, Dr. Tustison manipulates arrays of numbers with medical relevance; more specifically, as a member of the UVA Medical Imaging Research Department, he develops computational techniques for facilitating quantitation of anatomical and/or functional variability in different populations or over time as a consequence of disease or injury. Areas of active research include various projects with neuroradiology faculty, collaborative pulmonary research using hyperpolarized gases, and the open-source dissemination of useful image analysis algorithms. The primary venue for the latter is the Advanced Normalization Tools (ANTs) and the Insight Toolkit (ITK) of the National Institutes of Health.

Research Area (select all applicable areas):

☐ Physics and engineering of imaging systems

☐ Chemistry and molecular biology of targeted contrast agents

X☐ Cardiovascular imaging

X☐ Lung imaging

X☐ Neuroimaging

X☐ Musculoskeletal imaging

☐ Image-guided interventions

X☐ Analytics

☐ None of the above

Education:

* 2004: **D.Sc. Biomedical Engineering**, *Washington University in St. Louis*, St. Louis, MO.
* 2000: **M.S. Biomedical Engineering**, *University of Virginia*, Charlottesville, VA.
* 1998: **B.S. Applied Physics: Computer Science**, *Brigham Young University*, Provo, UT.