Curriculum Vitae
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Nagesh Adluru

Associate Scientist
Waisman Laboratory for Brain Imaging and Behavior
University of Wisconsin Madison, WI 53703

Personal Information

DOB: 02/18/1983
Citizenship: Indian
Residency: U.S. permanent resident
Tel: (267)205-0207
Email: nagesh.adluru@gmail.com
URL: http://www.nageshadluru.com

Research Summary

My core training is in computer science and in sub-fields of computer vision and machine learning. Currently, my research program is to model various steps in neuroimage processing and analysis with special emphasis on using machine learning algorithms. I have been performing analysis of MRI data from a variety of neuroscientific studies for over 8 years now.

Education

- **Temple University (Philadelphia, PA), 2005 - 2009**
  PhD in Computer and Information Sciences.
  Thesis: *Techniques for extracting contours and merging maps*.
  Adviser: Longin Jan Latecki.
- **Temple University (Philadelphia, PA), 2003 - 2005**
  MS in Computer and Information Sciences.
  Project: *Building an anti-virus for silent patching of software vulnerabilities*.
  Adviser: Richard Beigel.
- **Jawaharlal Nehru Technological University (Hyderabad, India), 1999-2003**
  B.Tech in Computer Science and Engineering.

Postdoctoral Fellowship

- **University of Wisconsin (Madison, WI), 2009 - 2011**
  Mentors: Moo K. Chung and Andrew L. Alexander

Previous Positions

- Assistant Scientist, **University of Wisconsin (Madison, WI), 2011 - 2016**

Grants

- **Ongoing**

1. NBA and GE Healthcare grant (Heiderscheit, Kijowski and Adluru). **Co-I**. 12/01/2016 - 11/30/2019. Clinical, biomechanical, and novel imaging biomarkers of hamstring strain injury potential in elite athletes.
2. R01EB022883 (Singh, Adluru and Johnson). **Co-I**. 08/01/2016 - 07/31/2019. Manifold-valued statistical models for longitudinal morphometric analysis.
3. R01MH080826 (Lainhart, Alexander and Adluru). **Co-I**. 07/01/2016-06/30/2021. Atypical Late Neurodevelopment in Autism: A longitudinal clinical phenotype and multimodal brain imaging study.
4. ADRC Pilot Grant (Singh, Adluru and Bendlin). **Co-PI**. 06/01/2016-05/31/2017. Alzheimer's disease research center pilot grant for methods development.
5. Amazon web services educational grant (Singh and Adluru). **Co-PI**. 09/1/2015-08/31/2017. Access to cloud resources for research and educational purposes.
6. U54AI117924 (Craven). 09/29/14-04/30/18 The Center for predictive computational phenotyping (CPCP). Role: Image processing and analysis.
7. UF1AG051216 (Shi-Jiang Li). 04/01/2016-03/31/2020. Alzheimer's disease connectome project (ADCP). Role: Image processing and analysis.
8. P01AT004952 (Davidson). 09/01/13-07/31/18. Wisconsin center for the neuroscience and psychophysiology of meditation. Role: Image processing and analysis.
9. R01AG037639 (Bendlin). 05/01/12-04/30/17. White matter degeneration: biomarkers in preclinical Alzheimers disease. Role: Image processing and analysis.
10. R01MH043454 (Davidson). 12/15/11-11/30/16. Neural substrates of affective style and emotion regulation. Role: Image processing and analysis.

- **Completed**

1. ICTR pilot grant (Singh and Adluru). **PI**. 09/1/2014-08/31/2015. UW Institute for clinical and rranslational research (ICTR) Type I Research Pilot Program.
2. P50MH100031 (Davidson). 09/01/13-08/31/15. Early neurodevelopmental origins of anxiety. Role: Image processing and analysis.
3. R01AG043125 (Johnson). 08/01/12-07/31/15. The effect of calorie restriction on brain aging. Role: Image processing and analysis.

Students

- **Current**

1. Jose Guerrero (Medical Physics - Graduate - NSF graduate fellow - PhD committee)
2. Seong Jae Kim (Computer Science - Graduate)
3. Ronak Mehta (Computer Science - Graduate)
4. Sathya N. Ravi (Computer Science and Math - Graduate)
5. Andrew J. Schoen (Computer Science - Graduate)

- **Past**
  1. Karthik Aroor (Electrical Engineering - Graduate - PhD committee)
  2. Emily Balczewski (Computer Science - Undergraduate - NSF IBS-SRP)
  3. Anne Bartosic (Undergraduate)
  4. Sylvia Charchut (Computer Science - Undergraduate)
  5. Tom Dubois (Undergraduate)
  6. Samuel Doran (Undergraduate)
  7. Daniel J. Destiche (Undergraduate)
  8. Chad Ennis (Undergraduate)
  9. Chris Hinrichs (Computer Science - Graduate)
  10. Andrew Hoy (Medical Physics - Graduate)
  11. Hyunwoo J. Kim (Computer Science - Graduate)
  12. Won Hwa Kim (Computer Science - Graduate)
  13. Sharon Lu (Undergraduate)
  14. Kamiya Motwani (Computer Science - Graduate)
  15. Bimaljit Pangli (Undergraduate)
  16. Danica Samsin (Undergraduate)
  17. Elizabeth Zakszewski (Medical Physics - Graduate)

Publications

- **Scientific Research Papers**

73. D. Dean, N. Lange, B. Travers, M. Prigge, N. Matsunami, K. Kellett, A. Freeman, K. Kane, **N. Adluru**, D. Tromp, D. Destiche, D. Samsin, B. Zielinski, P. Fletcher, J. Anderson, A. Froehlich, M. Leppert, E. Bigler, J. Lainhart and A. Alexander.□Multivariate characterization of white matter heterogeneity in autism spectrum disorder. NeuroImage: Clinical 2017. [PDF].
72. A. Racine, A. Merluzzi, **N. Adluru**, D. Norton, R. Koscik, L. Clark, S. Berman, C. Nicholas, S. Asthana, A. Alexander, K. Blennow, H. Zetterberg, W. Kim, V. Singh, C. Carlsson, B. Bendlin, S. Johnson. Association of longitudinal white matter degeneration and cerebrospinal fluid biomarkers of neurodegeneration, inflammation and Alzheimer's disease in late-middle-aged adults. Brain Imaging and Behavior 2017. [PDF].
71. M. Chung, J. Hanson, **N. Adluru**, A. Alexander, R. Davidson, S. Pollak.□Integrative structural brain network analysis in diffusion tensor imaging. Brain Connectivity 2017. [PDF].
70. J-P. Yu, I. Ong, J. Gonzalez, S. McIlwain, E. Sawin, A. Schoen, **N. Adluru**, Andrew Alexander.□ Gut microbiome populations are associated with structure-specific changes in white matter architecture. Translational Psychiatry 2017 (to appear). [PDF].

69. D. Dean, E. Planalp, W. Wooten, **N. Adluru**, S. Kecskemeti, C. Frye, C. Schmidt, N. Schmidt, M. Styner, H. Goldsmith, R. Davidson, A. Alexander.□Mapping white matter microstructure in the one month human brain. Nature Scientific Reports 2017 (to appear). [PDF].
68. Y. Liu, B. Doherty, **N. Adluru**, M. Chung, H. Vorperian.□A novel registration-based semi-automatic mandible segmentation pipeline using computed tomography images to study mandibular development. Journal of Computer Assisted Tomography (JCAT) 2017 (to appear). [PDF].
67. L. Zheng, H. Kim, **N. Adluru**, M. Newton, V. Singh.□Riemannian variance filtering: an independent filtering scheme for statistical tests on manifold-valued data. The international Workshop on DIFFerential geometry in Computer Vision and Machine Learning (DIFF-CVML) at CVPR (CVPRW) 2017 (to appear). [PDF].
66. R. Chakraborty, **N. Adluru**, V. Singh, B. Vemuri.□A unified geometric framework for the statistical analysis of trajectories of distinct dimensions. IEEE International Conference on Computer Vision (ICCV) 2017 (to appear). [PDF].
65. H. Kim, **N. Adluru**, H. Suri, B. Vemuri, S. Johnson, V. Singh.□Riemannian nonlinear mixed effects models: analyzing longitudinal deformations in Neuroimaging. IEEE International Conference on Computer Vision and Pattern Recognition (CVPR) 2017. [PDF].
64. **N. Adluru**, Z. Luo, C. Hulle, A. Schoen, R. Davidson, A. Alexander, H. Goldsmith.□ Anxiety-related experience-dependent white matter structural differences in adolescence: A monozygotic twin difference approach. Nature Scientific Reports 2017 (to appear). [PDF].

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63. **N. Adluru**, D. Destiche, D. Tromp, R. Davidson, H. Zhang and A. Alexander.□ Evaluating consistency of deterministic streamline tractography in non-linearly warped DTI data. arXiv:1602.02117 [physics.med-ph] 2016. [PDF].
62. M. Ly, **N. Adluru**, D. Destiche, S. Lu, J. Oh, S. Hoscheidt, A. Alexander, O. Okonkwo, H. Rowley, M. Sager, S. Johnson and B. Bendlin.□ Fornix microstructure and memory performance is associated with altered neural connectivity during episodic recognition. Journal of the International Neuropsychological Society 2016. [PDF]. [PMCID: PMC4762064].
61. S. Hwang, **N. Adluru**, M. Collins, S. Ravi, B. Bendlin. S. Johnson and V. Singh.□ Coupled harmonic bases for longitudinal characterization of brain networks. IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2016. [PDF]. [PMCID: PMC5089208].
60. W. Kim, H. Kim, **N. Adluru** and V. Singh.□Latent variable graphical model selection using harmonic analysis: applications to the human connectome project. IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2016. [PDF]. [NIHMSID: 824434].
59. H. Kim, B. Smith, **N. Adluru**, C. Dyer, S. Johnson and V. Singh.□Abundant inverse regression using sufficient reduction and its applications. European Conference on Computer Vision (ECCV) , 2016. [PDF]. [PMCID: PMC5083122].

58. W. Kim, S. Hwang, **N. Adluru**, S. Johnson and V. Singh.□ Adaptive signal recovery on graphs via harmonic analysis for experimental design in neuroimaging. European Conference on Computer Vision (ECCV) , 2016. [PDF]. [PMCID: PMC5088106].
57. D. Dean, B. Travers, **N. Adluru**, D. Tromp, D. Destiche, D. Samsin, M. Prigge, B. Zielinski, P. Fletcher, J. Anderson, A. Froehlich, E. Bigler, N. Lange, J. Lainhart and A. Alexander.□ Investigating the microstructural correlation of white matter in autism spectrum disorder. Brain Connectivity 2016. [PDF]. [PMCID: PMC4913512].
56. A. Merluzzi, D. Dean, **N. Adluru**, G. Suryawanshi, O. Okonkwo, J. Oh, B. Hermann, M. Sager, S. Asthana, H. Zhang, S. Johnson, A. Alexander and B. Bendlin.□ Age-dependent differences in brain tissue microstructure assessed with neurite orientation dispersion and density imaging. Neurobiology of Aging 2016. [PDF]. [PMCID: PMC4893194].
55. K. Melah, S. Lu, S. Hoscheidt, A. Alexander, **N. Adluru**, D. Destiche, C. Carlsson, H. Zetterber, K. Blennow, O. Okonkwo, C. Gleason, M. Dowling, C. Bratzke, H. Rowley, M. Sager, S. Asthana, S. Johnson and B. Bendlin.□ Cerebrospinal fluid markers of Alzheimer's pathology and microglial activation are associated with altered white matter microstructure in asymptomatic adults at risk for Alzheimer's disease. Journal of Alzheimer's Disease 2016. [PDF]. [PMCID: PMC4760877]
54. D. Dean, J. O'Muircheartaigh, H. Dirks, B. Travers, **N. Adluru**, A. Alexander and S. Deoni.□Mapping an index of the myelin g-ratio in infants using magnetic resonance imaging. NeuroImage 2016. [PDF]. [PMCID: PMC4851913].
53. R. Lapate, B. Rokers, D. Tromp, N. Orfali, J. Oler, S. Doran, **N. Adluru**, A. Alexander and R. Davidson.□Awareness of emotional stimuli determines the behavioral consequences of amygdala activation and amygdala-prefrontal connectivity. Nature Scientific Reports 2016. [PDF]. [PMCID: PMC4867584].

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52. S. Hwang, M. Collins, S. Ravi, V. Ithapu, **N. Adluru**, S. Johnson and V. Singh.□A projection free method for generalized eigenvalue problems with a nonsmooth regularizer. IEEE International Conference on Computer Vision (ICCV) 2015. [PDF]. [PMCID: PMC4828964].
51. B. Travers, E. Bigler, D. Tromp, **N. Adluru**, D. Destiche, D. Samsin, A. Froehlich, M. Prigge, T. Duffield, N. Lange, A. Alexander and J. Lainhart.□Brainstem White Matter Predicts Individual Differences in Manual Motor Difficulties and Symptom Severity in Autism. Journal of Autism and Developmental Disorders 2015. [PDF]. [PMCID: PMC4554823].
50. W. Kim, V. Singh, M. Chung, **N. Adluru**, B. Bendlin and S. Johnson.□Multi-resolution statistical analysis on graph structured data in neuroimaging. IEEE International Symposium on Biomedical Imaging (ISBI) 2015. [PDF]. [PMCID: PMC4895919].
49. B. Travers, D. Tromp, **N. Adluru**, N. Lange, D. Destiche, C. Ennis, J. Nielsen, A. Froehlich, M. Prigge, P. Fletcher, J. Anderson, B. Zielinski, E. Bigler, J. Lainhart and A. Alexander.□Atypical development of white matter microstructure of the corpus callosum in males with autism: a longitudinal investigation. Molecular Autism 2015. [PDF]. [PMCID: PMC4359536].

48. H. Kim, **N. Adluru**, M. Banerjee, B. Vemuri and V. Singh.□ Interpolation on the manifold of K component Gaussian mixture models (GMMs). IEEE International Conference on Computer Vision (ICCV) 2015. [PDF]. [PMCID: PMC4816648].
47. W. Kim, **N. Adluru**, M. Chung, O. Okonkwo, S. Johnson, B. Bendlin and V. Singh.□ Multi-resolution statistical analysis of brain connectivity graphs in preclinical Alzheimer's disease. NeuroImage 2015. [PDF]. [PMCID: PMC4554826].
46. **N. Adluru**, X. Yang and L. Latecki.□Sequential Monte Carlo for Maximum Weight Subgraphs with Application to Solving Image Jigsaw Puzzles. International Journal of Computer Vision (IJCV) 2015. [PDF]. [PMCID: PMC4456043].

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45. **N. Adluru**, D. Destiche, S. Lu, S. Doran, A. Birdsill, K. Melah, O. Okonkwo, A. Alexander, M. Dowling, S. Johnson, M. Sager and B. Bendlin.□ White matter microstructure in late middle-age: effects of apolipoprotein E4 and parental family history of Alzheimer's disease. NeuroImage: Clinical 2014. [PDF]. [PMCID: PMC4053649].
44. H. Kim, **N. Adluru**, M. Collins, M. Chung, B. Bendlin, S. Johnson, R. Davidson and V. Singh.□ Multivariate general linear models (MGLM) on Riemannian manifolds with applications to statistical analysis of diffusion weighted images. IEEE Computer Vision and Pattern Recognition (CVPR) 2014. [PDF]. [PMCID: PMC4288036].
43. H. Kim, **N. Adluru**, B. Bendlin, S. Johnson, B. Vemuri and V. Singh.□ Canonical correlation analysis on Riemannian manifolds and its applications. European Conference on Computer Vision (ECCV) 2014. [PDF]. [PMCID: PMC4194269].
42. A. Racine, **N. Adluru**, A. Alexander, B. Christian, O. Okonkwo, J. Oh, C. Cleary, A. Birdsill, A. Hillmer, D. Murali, T. Barnhart, C. Gallagher, C. Carlsson, H. Rowley, M. Dowling, S. Asthana, M. Sager, B. Bendlin and S. Johnson.□Associations between white matter microstructure and amyloid burden in preclinical Alzheimer's disease: A multimodal imaging investigation. NeuroImage: Clinical 2014. [PDF]. [PMCID: PMC4053642].
41. E. Zakszewski, **N. Adluru**, D. Tromp, N. Kalin and A. Alexander.□A Diffusion Tensor Based White Matter Atlas for Rhesus Macaques. PLOS ONE 2014. [PDF]. [PMCID: PMC4159318].
40. A. Hosseinbor, W. Kim, **N. Adluru**, A. Acharya, H. Vorperian and M. Chung.□ The 4D hyperspherical diffusion wavelet: a new method for detection of localized anatomical variation. Medical Image Computing and Computer Assisted Intervention (MICCAI) 2014. [PDF]. [PMCID: PMC4317359].
39. B. Travers, E. Bigler, D. Tromp, **N. Adluru**, A. Froehlich, C. Ennis, N. Lange, J. Nielsen, M. Prigge, A. Alexander and J. Lainhart.□Longitudinal processing speed impairments in males with autism and the effects of white matter microstructure. Neuropsychologia 2014. [PDF]. [PMCID: PMC3946881].
38. G. Adluru, Y. Gur, J. Andersen, L. Richards, **N. Adluru** and E. Bella.□Assessment of white matter microstructure in stroke patients using NODDI. IEEE Engineering in Medicine and Biology Society (EMBS) 2014. [PDF]. [PMCID: PMC4440535].

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37. K. Sillay, L. Kumbier, C. Ross, M. Brady, A. Alexander, A. Gupta, **N. Adluru**, G. S. Miranpuri and J. Williams.□ Perioperative brain shift and deep brain stimulating electrode deformation analysis: implications for rigid and non-rigid devices. Annals of Biomedical Engineering 2013. [PDF]. [PMCID: PMC5087606].

36. M. Chung, J. Hanson, H. Lee, **N. Adluru**, A. Alexander, R. Davidson and S. Pollak.□ Persistent homological sparse network approach to detecting white matter abnormality in maltreated children: MRI and DTI multimodal study. Medical Image Computing and Computer Assisted Intervention (MICCAI) 2013. [PDF]. [PMCID: PMC4133555].

35. J. Hanson, **N. Adluru**, M. Chung, A. Alexander and R. Davidson, S. Pollak.□Early neglect is associated with alterations in white matter integrity and cognitive functioning. Child Development 2013. [PDF]. [PMCID: PMC3690164].

34. W. Kim, **N. Adluru**, M. Chung, S. Charchut, J. GadElkarim, L. Altschuler, T. Moody, A. Kumar, V. Singh and A. Leow.□ Multi-resolutional brain network filtering and analysis via wavelets on non-Euclidean space. Medical Image Computing and Computer Assisted Intervention (MICCAI) 2013. [PDF]. [PMCID: PMC3918676].

33. **N. Adluru**, B. Hanlon, A. Lutz, J. Lainhart, A. Alexander and R. Davidson.□Penalized likelihood phenotyping: Unifying voxelwise analyses and multi-voxel pattern analyses in neuroimaging. Neuroinformatics 2013. [PDF]. [PMCID: PMC3624987].

32. **N. Adluru**, H. Zhang, D. Tromp and A. Alexander.□ Effects of DTI spatial normalization on white matter tract reconstructions. International Society for Photooptical Instrumentation Engineers (SPIE) Medical Imaging 2013. [PDF]. [PMCID: PMC3807852].

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31. **N. Adluru**, H. Zhang, A. Fox, S. Shelton, C. Ennis, A. Bartosic, J. Oler, E. Zakszewski, J. Gee, N. Kalin and A. Alexander.□A Diffusion tensor brain template for Rhesus Macaques. NeuroImage 2012. [PDF]. [PMCID: PMC3195880].

30. **N. Adluru**, V. Singh and A. Alexander.□Adaptive cuts for extracting specific white matter tracts. IEEE International Symposium on Biomedical Imaging (ISBI) 2012. [PDF]. [PMCID: PMC3807817].

29. **N. Adluru**, C. Ennis, R. Davidson and A. Alexander.□Max margin general linear modeling for neuroimage analyses. IEEE Mathematical Methods in Biomedical Image Analysis (MMBIA) 2012. [PDF]. [PMCID: PMC3807858].

28. B. Travers, **N. Adluru**, C. Ennis, D. Tromp, D. Destiche, S. Doran, E. Bigler, N. Lange, J. Lainhart and A. Alexander.□Diffusion tensor imaging in autism spectrum disorder: a review. Autism Research 2012. [PDF]. [PMCID: PMC3474893].

27. A. Alexander, S. Hurley, A. Samsonov, **N. Adluru**, A. Hosseinbor, P. Mossahebi, D. Tromp, E. Zakszewski and A. Field.□Characterization of cerebral white matter properties using quantitative magnetic resonance imaging stains. Brain Connectivity 2012. [PDF]. [PMCID: PMC3360545].

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26. E. Zakszewski, J. Moriano, A. Fox, **N. Adluru**, A. Converse, N. Kalin and A. Alexander.□ Comparison of probabilistic diffusion tensor tractography and histological tracer studies in the Rhesus Macaque. International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) workshop on Computational Diffusion MRI 2011. [PDF]. [PMCID: Policy exempt].
25. M. Chung, S. Seo, **N. Adluru** and H. Voperian.□Hot spots conjecture and its application to modeling tubular structures. International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) workshop on Machine Learning in Medical Imaging 2011. [PDF]. [PMCID: PMC5082282].
24. X. Yang, **N. Adluru** and L. Latecki.□Particle filter with state permutations for solving image jigsaw puzzles. IEEE Computer Vision and Pattern Recognition (CVPR) 2011. [PDF]. [PMCID: PMC5083123].
23. D. Tromp, **N. Adluru**, A. Alexander and M. Emborg.□Simulating convection-enhanced delivery in the putamen using probabilistic tractography. IEEE International Symposium on Biomedical Imaging (ISBI) 2011. [PDF]. [PMCID: PMC5082279].
22. M. Chung, **N. Adluru**, K. Dalton, A. Alexander and R. Davidson.□ Scalable brain network construction on white matter fibers. International Society for Photo-optical Instrumentation Engineers (SPIE) Medical Imaging 2011. [PDF]. [PMCID: PMC4447194].
21. **N. Adluru**, M. Chung and A. Alexander.□Applications of ϵ-radial networks in neuroimage analyses. Advances in Image and Video Technology, Lecture Notes in Computer Science (LNCS) 2011. [PDF]. [PMCID: 5327954].

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20. **N. Adluru**, M. Chung, A. Alexander, K. Dalton and R. Davidson.□ Characterizing brain connectivity using ϵ-radial nodes: application to Autism classification. International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) workshop on Computational Diffusion MRI 2010. [PDF]. [PMCID: Policy exempt].
19. C. Lu, **N. Adluru**, H. Ling and L. Latecki.□ Contour based object detection using part-bundles. Computer Vision and Image Understanding (CVIU) 2010. [PDF]. [PMCID: 5328026].
18. M. Chung, **N. Adluru**, J. Lee, J. Lainhart and A. Alexander.□ Cosine series representation of 3D curves and its application to white matter fiber bundles in diffusion tensor imaging. Statistics and Its Interface (SII) 2010. [PDF]. [PMCID: PMC3541410].
17. K. Motwani, **N. Adluru**, C. Hinrichs, A. Alexander and V. Singh.□Epitome driven 3-D Diffusion Tensor Image segmentation: on extracting *specific* structures. Neural Information Processing Systems (NIPS) 2010. [PDF]. [PMCID: PMC3065191].
16. N. Lange, M. DuBray, J. Lee, M. Froimowitz, **N. Adluru**, A. Froehlich, B. Wright, C. Ravichandran, T. Fletcher, E. Bigler, A. Alexander and J. Lainhart.□ Atypical diffusion tensor hemispheric asymmetry in autism. Autism Research 2010. [PDF]. [PMCID: PMC3215255].
15. D. Han, V. Singh, J. Lee, **N. Adluru** and A. Alexander.□An experimental evaluation of diffusion tensor image segmentation using graph cuts. IEEE Engineering in Medicine and Biology Society (EMBS) 2009. [PDF]. [PMCID: PMC4433541].

14. C. Lu, L. Latecki, **N. Adluru**, X. Yang and H. Ling.□Shape guided contour grouping with particle filters. IEEE International Conference on Computer Vision (ICCV) 2009. [PDF]. [PMCID: PMC5110031]
13. R. Lakämper and **N. Adluru**.□Using virtual scans for improved mapping and evaluation. Autonomous Robots (AR) 2009. [PDF]. [PMCID: PMC5100011].
12. M. Chung, **N. Adluru**, J. Lee, J. Lainhart and A. Alexander.□Efficient parametric encoding scheme for white matter fiber bundles. IEEE Engineering in Medicine and Biology Society (EMBS) 2009. [PDF]. [PMCID: PMC4433542].
11. **N. Adluru**, C. Hinrichs, M. Chung, J. Lee, V. Singh, E. Bigler, N. Lange, J. Lainhart and A. Alexander.□Classification in DTI using shapes of white matter tracts. IEEE Engineering in Medicine and Biology Society (EMBS) 2009. [PDF]. [PMCID: PMC4437626].
10. **N. Adluru** and L. Latecki.□Contour grouping based on contour-skeleton duality. International Journal of Computer Vision (IJCV) 2009. [PDF].

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9. **N. Adluru**, L. Latecki, M. Sobel and R. Lakämper.□ Merging maps of multiple robots. International Conference on Pattern Recognition (ICPR) 2008. [PDF].
8. X. Yang, **N. Adluru**, L. Latecki, X. Bai and A. Gross.□ Symmetry of shapes via self-similarity. International Symposium on Visual Computing (ISVC) 2008. [PDF].
7. R. Lakämper and **N. Adluru**.□ Using virtual Scans to improve alignment performance in robot mapping. NIST Performance Metrics for Intelligent Systems (PerMIS) 2008. [PDF].
6. R. Lakämper and **N. Adluru**.□ Improving sparse laser scan alignment with virtual scans. IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) 2008. [PDF].

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5. R. Lakämper, A. Nüchter, **N. Adluru** and L. Latecki.□Performance of 6D LuM and FFS SLAM: an example for comparison using grid and pose based evaluation methods. NIST Performance Metrics for Intelligent Systems Workshop (PerMIS) 2007. [PDF].
4. R. Lakämper, **N. Adluru**, L. Latecki and R. Madhavan.□Multi robot mapping using force field simulation. Journal of Field Robotics (JFR) 2007. [PDF].
3. R. Lakämper, **N. Adluru** and L. Latecki.□Force field based n-scan alignment. European Conference on Mobile Robotics (ECMR) 2007. [PDF].
2. **N. Adluru**, L. Latecki, R. Lakämper, T. Young, X. Bai and A. Gross.□ Contour grouping based on local symmetry. IEEE International Conference on Computer Vision (ICCV) 2007. [PDF].

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1. **N. Adluru**, L. Latecki, R. Lakämper and R. Madhavan.□Robot mapping for rescue robots. IEEE International Workshop on Safety, Security and Rescue Robotics (SSRR) at NIST 2006. [PDF].

- **Expository Book Chapters**

2. H. Kim, **N. Adluru**, B. Bendlin, S. Johnson, B. Vemuri and V. Singh.□ Canonical correlation analysis on $SPD(n)$ manifolds. Riemannian Computing and Statistical Inferences in Computer Vision (RCCV) 2016. [PDF].

1. R. Lakämper and **N. Adluru**.□ Force field simulation based laser scan alignment. Recent Advances in Multi-Robot Systems, I-Tech Education and Publishing, Vienna, Austria 2008. [PDF].

- **Conference Abstracts (1-2 pages)**

50. H. Kim, **N. Adluru**, H. Suri, B. Vemuri, S. Johnson, V. Singh. Longitudinal analysis of structural MRI in Alzheimer's disease using Riemannian mixed effects models. *Alzheimer's Association International Conference (AAIC) 2017.*
49. R. John, **N. Adluru**, B. Bendlin, S. Johnson, V. Singh, J. Patel. Image analysis through conversations: reducing barriers and improving provenance tracking in Alzheimer's disease research. *Alzheimer's Association International Conference (AAIC) 2017.*
48. W. Kim, S. Hwang, **N. Adluru**, S. Johnson, V. Singh. Graph completion: a generalization of Netflix prize problem to designing cost effective neuroimaging trials in preclinical AD. *Alzheimer's Association International Conference (AAIC) 2017.*
47. **N. Adluru**, R. Kijowski, F. Liu. Improved muscle microstructure analysis with diffusion weighted imaging and advanced tissue modeling. *International Society for Magnetic Resonance in Medicine (ISMRM) 2017.*
46. **N. Adluru**, H. Kim, R. Davidson, A. Alexander, S. Johnson, V. Singh. Manifold statistics for longitudinal analysis of MRI data. *International Society for Magnetic Resonance in Medicine (ISMRM) 2017.*
45. M. Chung, J. Hanson, **N. Adluru**, A. Alexander, R. Davidson, S. Pollak. Exponential decay law for the structural brain network of maltreated children. *International Society for Magnetic Resonance in Medicine (ISMRM) 2017.*
44. R. Steiner, S. Short, R. Santelli, A. Verde, A. Gupta, F. Budin, K. Gilmore, **N. Adluru**, G. Gerig, J. Gilmore, M. Styner. The neonatal DTI fiber atlas for studies of brain development at birth. *International Society for Magnetic Resonance in Medicine (ISMRM) 2017.*
43. D. Dean, E. Planalp, W. Wooten, **N. Adluru**, H. Goldsmith, R. Davidson, A. Alexander. Patterns of microstructural correlations in the white matter of the neonatal brain. *International Society for Magnetic Resonance in Medicine (ISMRM) 2017.*

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42. H. Kim, **N. Adluru**, S. Johnson and V. Singh. Manifold-Valued Statistical Models for Longitudinal Morphometric Analysis in Preclinical Alzheimers Disease. *Alzheimer's Association International Conference (AAIC) 2016.*

41. S. Hwang, W. Kim, B. Bendlin, **N. Adluru**, V. Singh. Multi-Resolution Analysis of DTI-Derived Brain Connectivity and the Influence of PET-Derived Alzheimer's Disease Pathology in a Preclinical Cohort. *Alzheimer's Association International Conference (AAIC), 2016.*
40. D. Dean, B. Travers, **N. Adluru**, D. Tromp, D. Destiche, A. Freeman, B. Zielinski, M. Prigge, J. Anderson, E. Bigler, N. Lange, A. Alexander, J. Lainhart. Longitudinal Development of White Matter in Autism Spectrum Disorder. *International Meeting for Autism Research (IMFAR) 2016.*
39. J. Guerrero, **N. Adluru**, S. Kecskemeti, R. Davidson, A. Alexander. Investigating the effects of intrinsic diffusivity on neurite orientation dispersion and density imaging (NODDI). *International Society for Magnetic Resonance in Medicine Workshop on Simultaneous Multi-Slice Imaging: Neuroscience & Clinical Applications (ISMRM-SMS) 2016.*
38. A. Merluzzi, D. Dean, A. Racine, **N. Adluru**, O. Okonkwo, J. Oh, S. Asthana, H. Zhang, B. Christian, A. Alexander, S. Johnson, B. Bendlin. Amyloid deposition in the posterior cingulate is associated with altered microstructure in cognitively asymptomatic individuals: findings from the WRAP study. *Alzheimer's Association International Conference (AAIC), 2016.*
37. A. Merluzzi, D. Dean, A. Racine, C. Carlsson, B. Christian, S. Johnson, O. Okonkwo, J. Oh, **N. Adluru**, G. Suryawanshi, H. Zetterberg, K. Blennow, S. Asthana, H. Zhang, A. Alexander, B. Bendlin. Amyloid deposition combined with CSF markers of neuroinflammation predict neurite loss in cognitively asymptomatic individuals. *Human Amyloid Imaging (HAI) 2016.*
36. K. McLaughlin, B. Travers, D. Dean, D. Tromp, **N. Adluru**, D. Destiche, D. Samsin, M. Prigge, A. Froehlich, E. Bigler, N. Lange, A. Alexander, J. Lainhart. Longitudinal Microstructure of the Thalamus and Anterior Limb of the Internal Capsule in Individuals with Autism Spectrum Disorder. *International Meeting for Autism Research (IMFAR) 2016.*
35. B. Travers, D. Dean, D. Tromp, **N. Adluru**, D. Destiche, B. Zielinski, M. Prigge, A. Froehlich, J. Anderson, P. Fletcher, E. Bigler, N. Lange, A. Alexander, J. Lainhart. Longitudinal, Voxel-Based Analysis of White Matter Contributions to Processing Speed in Individuals with Autism Spectrum Disorder. *International Meeting for Autism Research (IMFAR) 2016.*

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34. G. Adluru, **N. Adluru**, S. Moeller, H. Zhang, L. Richards, E. DiBella. Simultaneous multi slice diffusion spectrum imaging for rapid acquisition of microstructure measures in stroke patients. *International Society for Magnetic Resonance in Medicine Workshop on Simultaneous Multi-Slice Imaging: Neuroscience & Clinical Applications (ISMRM-SMS) 2015.*
33. W. Kim, **N. Adluru**, M. Chung, O. Okonkwo, S. Johnson, B. Bendlin, V. Singh. A Framework for Performing Multi-Resolution Statistical Analysis of Brain Connectivity Graphs for Preclinical Alzheimer's Disease. *Alzheimer's Association International Conference (AAIC) 2015.*

32. A. Merluzzi, D. Dean, C. Carlsson, S. Johnson, O. Okonkwo, J. Oh, **N. Adluru**, G. Suryawanshi, H. Zetterberg, K. Blennow, S. Asthana, H. Zhang, A. Alexander, B. Bendlin. Cerebrospinal Fluid Biomarkers Associated with Medial Temporal Lobe Pathology in Preclinical AD. *Society for Neuroscience (SfN) 2015.*
31. A. Merluzzi, D. Dean, C. Carlsson, S. Johnson, O. Okonkwo, J. Oh, **N. Adluru**, G. Suryawanshi, H. Zetterberg, K. Blennow, S. Asthana, H. Zhang, A. Alexander, B. Bendlin. Neuroinflammation in Preclinical AD is Associated with Parahippocampal Pathology and Memory Deficits. *Alzheimer's Association International Conference (AAIC) 2015.*

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30. M. Ly, **N. Adluru**, J. Oh, A. Alexander, O. Okonkwo, H. Rowley, M. Sager, S. Johnson, B. Bendlin. White matter microstructure and neural function during aging. *Human Brain Mapping (HBM) 2014*.
29. B. Travers, E, Bigler, D. Tromp, **N. Adluru**, D. Destiche, M. Prigge, A. Froehlich, N. Lange, A. Alexander, J. Lainhart. Manual Motor Performance Related to Autistic Traits, Daily Living Skills, and White Matter Microstructure in Autism Spectrum Disorder. *International Meeting for Autism Research (IMFAR) 2014*.
28. R. Lapate, B. Rokers, D. Tromp, N. Orfali, S. Doran, **N. Adluru**, A.L. Alexander, R. Davidson. Visual awareness of emotional stimuli changes the behavioral fate of amygdalar responses and amygdala-PFC coupling. *Cognitive Neuroscience Society 2014*.
27. R. Lapate, B. Rokers, D. Tromp, N. Orfali, S. Doran, **N. Adluru**, A.L. Alexander, R. Davidson. Amygdalar function and connectivity underlie affective misattribution after non-conscious emotional processing. *Society for Psychophysiological Research 2014 (top 10 among 470+)*.

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26. D. Tromp, A. Fox, J. Oler, S. Shelton, J. Rogers, J. Blangero, **N. Adluru**, A. Alexander, R. Davidson, N. Kalin. Anxious Temperament in 539 Young Rhesus Monkeys Predicts Increased Integrity of Significantly Heritable Region within the Internal Capsule. *Society of Biological Psychiatry 2013 (Top Poster Finalist)*.
25. A. Fox, A. Shackman, D. Tromp, R. Birn, J. Oler, **N. Adluru**, S. Nanda, S. Shelton, A. Alexander, R. Davidson, P. Roseboom, N.Kalin. Amygdala-prefrontal connectivity predicts anxious temperament and gene expression in the primate dorsal amygdala. *Biological Psychiatry 2013*.
24. R. Lapate, B. Rokers, D. Tromp, N. Orfali, S. Doran, **N. Adluru**, A. Alexander, R. Davidson. Amygdalar function and connectivity underlie affective misattribution after non-conscious emotional processing. *International Society for Psychophysiological Research 2013*.
23. **N. Adluru**, C. Burghy, N. Schmidt, S. Doran, D. Stodola, C. V. Hulle, H. H. Goldsmith, R. Davidson, A. Alexander. Monozygotic twin discordance in early general anxiety predicts later differences in pre-frontal white matter connections. *Society for Research in Child Development (SRCD) 2013*.

22. S. Kecskemeti, **N. Adluru**, S. Hurley, A. Alexander. Multi-spectral $T1$ Weighted Imaging and $T1$ Quantification using $3D$ Radial k-space Trajectory. *International Society for Magnetic Resonance in Medicine (ISMRM) 2013 (Summa Cum Laude Merit Award)*.
21. E. Zakszewski, **N. Adluru**, N. Kalin, A. Alexander. A Digital White Matter Atlas of the Rhesus Macaque Brain. *International Society for Magnetic Resonance in Medicine (ISMRM) 2013*.
20. E. Zakszewski, **N. Adluru**, N. Kalin, A. Alexander. Connectivity-based segmentation of the precuneus in individual adolescent rhesus macaque DTI data. *International Society for Magnetic Resonance in Medicine (ISMRM) 2013*.
19. B. Travers, E. Bigler, **N. Adluru**, D. Tromp, C. Ennis, M. Prigge, A. Froehlich, N. Lange, A. Alexander, J. Lainhart. Longitudinal Changes in Processing Speed and Corresponding White Matter Microstructure in Autism Spectrum Disorder (ASD). *International Meeting for Autism Research (IMFAR) 2013*.

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18. D. Tromp, A. Fox, J. Oler, **N. Adluru**, A. Alexander, R. Davidson, N. Kalin. Cortisol predicts increased internal capsule integrity in a large sample of non-human primates. *International Society of Psychoneuroendocrinology (ISPNE) 2012*.
17. J. Cooperrider, E. Bigler, J. Anderson, S. Doran, C. Eennis, **N. Adluru**, A. Alexander, A. Froehlich, M. Prigge, J. Lainhart. Dr. Temple Grandin: A neuropsychological and multimodal neuroimaging case study of a savant with autism. *Society for Neuroscience (SFN) 2012*.
16. **N. Adluru**, D. Tromp, H. Zhang, A. Alexander. Spatial Normalization of DTI Preserves Tract Reconstruction of Major White Matter Pathways. *Human Brain Mapping (HBM) 2012*.
15. **N. Adluru**, R. Davidson, A. Alexander. Composite Hypothesis Testing using Support Vector Regression. *International Society for Magnetic Resonance in Medicine (ISMRM) 2012*.
14. **N. Adluru**, D. Tromp, H. Zhang, A. Alexander. Evaluating Tractography in the Spatially Normalized DTI Data. *International Society for Magnetic Resonance in Medicine (ISMRM) 2012*.
13. M. Chung, **N. Adluru**, J. Lainhart, N. Lange, A. Alexander. Electrical Circuit Model for White Matter Fiber Tracts in Diffusion Tensor Imaging. *Human Brain Mapping (HBM) 2012*.
12. A. Alexander, B. Travers, **N. Adluru**, N. Lange, C. Ennis, P. T. Fletcher, M. B. DuBray, A. Froehlich, J. Lainhart. Longitudinal DTI of the Corpus Callosum in Individuals with Autism Spectrum Disorder: Differences in Fractional Anisotropy. *International Meeting for Autism Research (IMFAR) 2012*.
11. E. Zakszewski, A. Fox, J. Oler, **N. Adluru**, A. K. Converse, J. M. Moirano, N. Kalin, A. L Alexander. Comparison of probabilistic diffusion tensor tractography with histological tracer studies and RSFC in the rhesus macaque. *International Society for Magnetic Resonance in Medicine (ISMRM) 2012 (Magna Cum Laude Merit Award)*.

10. Z. Xu, M. Emborg, D. Tromp, **N. Adluru**, M. Brady, R. Raghavan, K. Kubota, A. Alexander. Probabilistic MRA Template of the Macaque Putamen for Guiding Convection Enhanced Delivery. *International Society for Magnetic Resonance in Medicine (ISMRM) 2012*.
9. D. Tromp, S. Hurley, M. Emborg, **N. Adluru**, M. Brady, R. Raghavan, K. Kubota, A. Alexander. Retrospective R1 Atlas Mapping of Brain Infusions. *International Society for Magnetic Resonance in Medicine (ISMRM) 2012*.

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8. **N. Adluru**, H. Zhang, A. Fox, E. Zakszewski, C. Ennis, A. Bartosic, A. Alexander, S. Shelton, N. Kalin. Computational White Matter Atlas for Young Rhesus Macaques. *International Society for Magnetic Resonance in Medicine (ISMRM) 2011*.

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7. **N. Adluru**, K. Dalton, A. Alexander, R. Davidson. Investigating asymmetry of structural connectivity in autism. *Human Brain Mapping (HBM) 2010*.
6. **N. Adluru**, K. Dalton, T. Graupner, A. Alexander, R. Davidson. Behavioral correlation with hemispheric structural connectivity in autism. *International Meeting For Autism Research (IMFAR) 2010*.
5. M. Chung, **N. Adluru**, K. Dalton, A. Alexander, R. Davidson. Characterization of structural connectivity in autism using graph networks with DTI. *Human Brain Mapping (HBM) 2010 (Best Abstract Award)*.
4. K. Dalton, **N. Adluru**, R. Davidson. Heart rate variability and brain function during emotional face and voice processing in autism. *International Meeting For Autism Research (IMFAR) 2010*.
3. E. Zakszkewski, **N. Adluru**, M. Emborg, A. Alexander. Co-registration of DTI tractography with Gd-enhanced T1 imaging in evaluation of CED studies in the rhesus macaque. *International Society for Magnetic Resonance in Medicine (ISMRM) 2010*.
2. A. Bartosic, C. Ennis, **N. Adluru**, A. Alexander. Evaluation of BET and 3DSkull-Strip for skull-stripping monkey brain data. *Human Brain Mapping (HBM) 2010*.
1. N. Lange, M. DuBray, J. Lee, M. Froimowitz, A. Froehlich, **N. Adluru**, B. Wright, C. Ravichandran, T. Fletcher, E. Bigler, A. Alexander, J. Lainhart. Atypical asymmetry of superior temporal gyrus and temporal stem white matter microstructure in autism. *International Meeting For Autism Research (IMFAR) 2010*.

Invited Talks

- Improved muscle microstructure analysis with diffusion weighted imaging and advanced tissue modeling, *International Society for Magnetic Resonance in Medicine (ISMRM), Honolulu, HI, April 24, 2017*.
- Advanced testing in brain morphometry, *Conte Center University of Wisconsin-Madison, August 9, 2016*.

- Advanced testing for detecting effects on brain networks, *Conte Center, University of Wisconsin-Madison, July 28, 2015*.
- Effective priors in diffusion image science of the brain, *Computation Informatics in Biology and Medicine (CIBM), University of Wisconsin-Madison, September 23, 2014*.
- Effects of DTI Spatial Normalization on White Matter Tract Reconstructions, *SPIE Medical Imaging Conference, Orlando, FL, February 10, 2013*.
- Adaptive Cuts for Extracting Specific White Matter Tracts, *IEEE International Symposium on Biomedical Imaging, Barcelona, Spain, May 5, 2012* (Talk was given by Vikas Singh on my behalf because of visa limitations).
- Modeling Neuroimage Processing and Analysis using Computer Vision and Machine Learning, *GE Global Research, Niskayuna, New York, January 2012*.
- Large Scale Data Mining of DTI Data in Non-Human Primates, *DTI and Brian Connectivity Workshop, Seoul National University, Seoul, South Korea, 2011*.
- Applications of Epsilon Radial Networks for Neuroimage Analyses, *Pacific-Rim Symposium on Image and Video Technology (PSIVT), Gwangju, South Korea, 2011*.
- Characterizing White Matter in Autism Spectrum Disorders, *Wisconsin Early Autism Project (WEAP) workshop, Madison, 2011*.
- Techniques for Mapping Brain Connectivity using Diffusion MRI, *Computational Informatics in Biology and Medicine (CIBM), University of Wisconsin-Madison, 2010*.
- Efficient Parametric Encoding Scheme for White Matter Fiber Bundles, *IEEE Engineering in Medicine & Biology Society (EMBS) Conference, Minneapolis, MN, September 6, 2009*.
- Techniques for Extracting Contours and Merging Maps, *Waisman Center for Brain Imaging and Behavior & Computational Informatics in Biology and Medicine (CIBM), University of Wisconsin-Madison, 2009*.
- Contour grouping using symmetry and hierarchy, *For CIS Freshmen, Temple University, November, 2008*.
- Contour grouping based on contour-skeleton duality, *Vision reading group at University of Pennsylvania, September 2008*.
- High-level overview of contour grouping at Temple, *For students of Community College of Philadelphia (CCP), August 2008*.
- Contour grouping based on local symmetry, *Colloquium: Computer and Information Sciences department, Temple University, October 2007*.
- Performance evaluation of Force Field Simulation and Lu-Milios registration, *Performance Metrics for Intelligent Systems Workshop, National Institute of Standards and Technology (NIST), Gaithersburg, Maryland, August 2007*.
- SLAM with shape similarity among scans, *Open House: Computer and Information Sciences department, Temple University, January 2007*.
- Robot mapping without odometry, *Open House: Computer and Information Sciences department, Temple University, January 2006*.

Professional Service

- Program committee for International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) workshop on Computational Diffusion MRI, 2012, 2013, 2014, 2015, 2016.
- Organizing committee for International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) workshop on Computational Diffusion MRI, 2011.
- Reviewing for: Neuroinformatics, Neuron, Neuroimage (NIMG), Human Brain Mapping (HBM), Journal of Affective Disorders (JAD), Magnetic Resonance in Medicine (MRM), Medical Image Computing and Computer Assisted Intervention (MICCAI), IEEE Transactions in Medical Imaging (TMI), Journal of Statistical Software (JSS), Computational Intelligence and Neuroscience, Medical Physics, IEEE International Conference on Data Mining (ICDM), IEEE International Conference on Computer Vision (ICCV), IEEE Computer Society Conference on Computer Vision and Pattern Recognition (CVPR), International Conference on Pattern Recognition (ICPR), European Conference on Computer Vision (ECCV), IEEE International Conference on Robotics and Automation (ICRA), IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS).
- On the graduate student committee for hiring faculty of Computer and Information Sciences department at Temple University from 2007 to 2008.

Professional Memberships

- Have been a member of IEEE, SPS, ISMRM.

Academic Experience

- Lab instructor for Diffusion Tensor Image Processing for a graduate course in the Department of Medical Physics, University of Wisconsin-Madison, Fall 2012, 2014, 2015, 2016.
- Guest Lecture on Overview of Diffusion Weighted MR Image Analysis of the Brain, Departments of Biostatistics and Medical Informatics & Computer Science, University of Wisconsin-Madison, Spring 2013.
- Guest Lecture on Modeling Diffusion Weighted MRI for Neuropsychology, Departments of Biostatistics and Medical Informatics & Statistics, University of Wisconsin-Madison, Fall 2012.
- Guest Lecture on Markov Random Fields for Natural Image Analysis, Department of Statistics, University of Wisconsin-Madison, Spring 2012.
- Guest Lecture on Composite Hypothesis Testing at Seoul National University, Seoul, South Korea, Fall 2011.
- Teaching Assistant for the following undergraduate courses in Computer and Information Sciences department, Temple University, Philadelphia:
    1. Operating Systems, 2005-2006.
    2. Network Security, 2004.
    3. Web development using JSP, 2004.

4. Programming in Java, 2004.

- Research Assistant in Computer and Information Sciences department, Temple University, Philadelphia, 2004 and 2006-present.

Industrial Intern Positions

- CVISION Technologies Inc. (Queens, NY), Summer 2006
  Project: Extracting text from document images using Robust Connected Component Analysis (RCCA). This work resulted in an industrial grant of $\sim \$25,000$ to Temple University (PI: Longin Jan Latecki).
- RJB Enterprises (Elkins Park, PA), Summer 2005
  Project: Develop a fully functional commercial website (http://www.ion-breeze.com). The website was built using C# and ASP.NET.
- Intelli-Media Inc. (Malvern, PA), Summer 2004
  Project: Classifying electronic documents of pharmaceutical industry by text mining using Unified Medical Language System Knowledge Source Server (UMLSKS). UMLSKS was developed by U.S. National Library of Medicine (NLM) of National Institutes of Health (NIH).

Programming Skills

- Programming Languages: MATLAB, R, Bash, Python, JAVA, C, C++.
- Neuroimaging Software Packages: Camino, FSL, DTI-TK, ANTS, MRTrix, Trackvis, AFNI.
- Platforms: Windows, Unix, Mac.

Recognition

- ISMRM Magna Cum Laude Merit Award for our ISMRM 2016 abstract.
- Society for Psychophysiological Research poster award top 10 out of 470+. 2014.
- Neuroinformatics paper mentioned on the cover of the 2013 issue of the journal.
- ISMRM Summa Cum Laude Merit Award for our ISMRM 2013 abstract.
- Our Society of Biological Psychiatry 2013 Abstract was a Top Poster Finalist.
- Travel award for 6^{th} International Workshop on Statistical Analysis of Neuronal Data, 2012.
- ISMRM Magna Cum Laude Award for our ISMRM 2012 abstract.
- Our NIPS work was critical in a $\$360K$ grant, NSF IIS-1116584, from National Science Foundation Robust Intelligence program with my collaborator as PI and my involvement as a researcher and a mentor for undergraduate training program aspect of it (Research Experiences for Undergraduates (REU)). Title: *Endowing Graph-Based Image Segmentation with Global 'Advice': Applications to Diffusion Tensor Images*, 2011.
- Google Travel Award for our NIPS 2010 paper.
- Best Abstract Award by the Organization for our 2010 Human Brain Mapping abstract.

- Awarded Morgridge Institutes for Research postdoctoral fellowship, 2009-2011.
- My PhD work was key in a $\$300K$ grant, NSF IIS-0812118, from National Science Foundation Computer Vision program with my adviser as PI. Title: *Simultaneous Contour Grouping and Medial Axis Estimation*, 2008.
- Awarded $\$1500$ (jointly with X. Yang and C. Lu) for the project on "Contour grouping using part similarity" by Temple University, 2008.
- Awarded "Graduate student travel award" of $\$2000$ for presenting our work on contour grouping at IEEE International Conference on Computer Vision (ICCV) by Temple University, 2007.
- Awarded "Academic excellence award" for ranking 1^{st} in B.Tech Computer Science and Engineering by Sree Nidhi Institute of Science and Technology, Hyderabad, India, 2003.
- Awarded "National Merit Scholarship" for academic achievement in Intermediate education by Government of India, 1999-2003.