DANIEL CHENG MOYER

Los Angeles, CA
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RESEARCH INTERESTS

Machine Learning, Human Brain Networks (Connectomics), Network Theory, Bayesian Non-Parametrics

EDUCATION

Univerisity of Southern California *Continuing*
Ph.D. in Computer Science
Advisors: Greg Ver Steeg and Paul Thompson

University of California, Los Angeles *June 2014*
B.S. in Mathematics of Computation, Minor in Statistics
Department and Latin Honors

RESEARCH EXPERIENCE

Stevens Neuroimaging and Informatics Institute March 2015 - Present
Graduate Research Assistant *Los Angeles, CA*

· Continuous Connectivity: [1-5]
· Blockmodels for Connectome Analysis: [7,8]

OpenMail Summer 2016
Intern (Data Science) *Venice, CA*

· CTR analysis and CTR optimization system design.
· Keyword analysis and generation.

Center for the Study of Choice January 2013 - June 2015
Independent Contractor, ARC Project ID: LP0990750 *Sydney, New South Wales, Australia*

· Designed and constructed a project specific data collection/warehousing framework.
· Built topic models for text analysis of user produced forum content.
· Related Paper: [10]

UCLA REU/Guided Research June 2012 - August 2013, and Summer 2014
Undergraduate Researcher *Los Angeles, CA*

· 2012 Project: Social Network Analysis for the LAPD Field ID Card Database.
· 2013 Project: Contagion in swarm models. Agent based models for swarm interactions with contagion.
· 2014 Project: Social Media/Text Analysis. NMF based regularized topic models for point process models of geotagged Twitter data.
· Related Paper [6] and Presentations [13,14].

Cohen Lab, Semel Institute, UCLA August 2011 - June 2013
Undergraduate Researcher *Los Angeles, CA*

· Related Paper [11] and Presentations [15-18].

AWARDS, SERVICE, AND TECHNICAL ABILITIES

Computer Languages C/C++, Python (NumPy/SciPy/Pandas), Matlab, R
Databases MySQL, PostgreSQL

Service:
Reviewer for IEEE International Symposium on Biomedical Imaging
Reviewer for [the Journal of] Scientific Reports
Reviewer for the Journal of Alzheimer's Disease
Reviewer for IEEE Transactions on Image Processing
Session Chair for SIPAIM 2015 (Imaging: Connectomics)

Awards:

MICCAI Young Scientist Award	Fall 2016
NSF Graduate Research Fellowship Program (NSF GRFP)	Fall 2016–Present
NSF GRFP Honorable Mention	Spring 2015
Viterbi Graduate Fellowship	Fall 2014-Spring 2016
Dean's Honors List	Fall '10, Winter & Spring '11, Winter & Spring '12

Teaching Experience:
Teaching Assistant, USC CSCI 103, Spring 2016
Lab Assistant (Teaching Role), UCLA PIC Lab Fall 2012-Spring 2014

Invited Talks:
MIT-CSAIL (Biomedical Imaging and Analysis Seminar) March '17

PUBLICATIONS

[1] Daniel Moyer, Boris Gutman, Neda Jahanshad, and Paul Thompson, *Product Space Decompositions for Continuous Representations of Brain Connectivity*, MICCAI–MLMI, September 2017.

[2] Daniel Moyer, Boris Gutman, Neda Jahanshad, and Paul Thompson, *A Restaurant Process Mixture Model for Connectivity Based Parcellation of the Cortex*, IPMI, June 2017.

[3] Dmitry Isaef, Boris Gutman, Daniel Moyer, Joshua Faskowitz, and Paul Thompson, *Cortical Connectome Registration Using Spherical Daemons* , SIPAIM, November 2017 (Oral Presentation).

[4] Daniel Moyer, Boris Gutman, Neda Jahanshad, Joshua Faskowitz, and Paul Thompson, *A Continuous Model of Cortical Connectivity*, MICCAI, October 2016 (Oral Presentation, Student Travel Award, Young Scientist Award).

[5] Daniel Moyer, Boris Gutman, Neda Jahanshad, Joshua Faskowitz, and Paul Thompson, *An Empirical Study of Continuous Connectivity Degree Sequence Equivalents*, MICCAI–BACON, October 2016 (Oral Presentation).

[6] Eric Le Lai, Daniel Moyer, Baichuan Yuan, Eric Fox, Blake Hunter, Andrea L. Bertozzi, Jeffery Brantingham, *Topic Time Series Analysis of Microblogs*, IMA Journal of Applied Math (2016) 81 (3): 409-431.

[7] Daniel Moyer, Boris Gutman, Gautam Prasad, Joshua Faskowitz, Greg Ver Steeg, and Paul Thompson, *Blockmodels for Connectome Analysis* SIPAIM, July 2015

[8] Daniel Moyer, Boris Gutman, Gautam Prasad, Greg ver Steeg, and Paul Thompson, *Mixed Membership Stochastic Blockmodels for the Human Connectome*, MICCAI-BAMBI Workshop, 2015.

[9] Talia M. Nir, Julio E. Villalon, Boris Gutman, Daniel Moyer, Neda Jahanshad, Clifford R. Jack Jr, Michael Weiner, Paul M. Thompson, *Alzheimer's Disease Classification with Novel Microstructural Metrics from Diffusion-Weighted MRI*, MICCAI-CDMRI Workshop, October 2015

[10] Daniel Moyer, Thayne Dye, Samuel L. Carson, Richard T. Carson, and David Goldbaum, *Determining the Influence of Reddit Posts on Wikipedia Pageviews*, ICWSM Workshop on Wikipedia, 2015.

[11] Pamela Douglas, Edward Lau, Ariana Anderson, Wesley Kerr, Austin Head, Margalit Aliza Wollner, Daniel Moyer, Michael Durnhofer, Wei Li, Jen Bramen, and Mark S. Cohen, *Single Trial Decoding of Belief Decision Making from EEG and fMRI Data Using ICA Features*, Frontiers in Human Neuroscience, 2013, 7:392. PMID: 23914164

CONFERENCE ABSTRACTS

[12] Daniel Moyer, Boris Gutman, Neda Jahanshad, and Paul Thompson, *Cluster Weighted Regressions for Connectome Analysis*; Organization for Human Brain Mapping, 22th Annual Meeting, Geneva, Switzerland 2016

[13] Daniel Moyer, Douglas de Jesus, and Lingge Li, *Evolutionary Agent-Based Models for Contagion*; Pacific Coast Undergraduate Mathematics Conference, Los Angeles 2014 (Oral Presentation)

[14] Douglas de Jesus, Lingge Li, and Daniel Moyer, *Metaheuristics Using Agent-Based Models for Swarm and Contagion*; Joint Math Meeting, Baltimore 2014

[15] Douglas P.K., Moyer D., Cohen M.S., *EEG-fMRI Coupling is Task Related and Spectrally Dependent*; Society for Neuroscience 2013 (Oral Presentation)

[16] Douglas P.K., Moyer D., Cohen M.S., *Co-localizing EEG and fMRI in the Spatial Domain*; Organization for Human Brain Mapping, 19th Annual Meeting, Seattle, Washington 2013 (Oral Presentation)

[17] Pamela Douglas & Daniel Moyer, *Temporal Kernel Canonical Correlation Analysis: Deconvolving EEG/fMRI Signals in Space and Time*; Human Brain Mapping, Beijing 2012

[18] Pamela Douglas, Daniel Moyer, and Mark S. Cohen, *Co-localizing EEG and fMRI in Space*; Society for Neuroscience, New Orleans, 2012