

KYLE W SINGLETON

CURRICULUM VITAE

PERSONAL HISTORY

UCLA Medical Imaging Informatics (MII) Group
Department of Radiological Sciences
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Los Angeles, CA 90024
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EDUCATION

University of California, Los Angeles Los Angeles, CA
Doctor of Philosophy in Biomedical Engineering; GPA: 3.5 June 2016 (Expected)

University of Virginia Charlottesville, VA
Bachelor of Science in Biomedical Engineering, Minor in Computer Science; GPA: 3.1 June 2006

DISSERTATION

Establishing Methods For Prognostic Graphical Model Adjustment Across Observational Cohorts
Advisors: Alex A.T. Bui and William Hsu

PROFESSIONAL EXPERIENCE

Graduate Student Researcher 2012 - Present
UCLA Medical Imaging Informatics, Los Angeles, CA
Compiled patient data from public and local data repositories. Constructed and evaluated prognostic disease models. Explored and implemented novel techniques for generalizing models between treatment domains.

National Library of Medicine Fellow 2008 - 2012
UCLA NLM Medical Imaging Informatics Training Program, Los Angeles, CA
Completed coursework in medical informatics, statistics, and machine learning. Developed, deployed, and supported tablet based surveying systems for medical data collection in Los Angeles clinics.

Post-baccalaureate Fellow 2006 - 2008
National Institutes of Health, Bethesda, MD
Section on Stroke Diagnostics and Therapeutics, NINDS
Designed, developed, and implemented workflow to accelerate image use in stroke research. Formatted and manipulated MRI data for development of a stroke atlas.

Undergraduate Researcher 2005 - 2006
Computational Systems Biology Lab, Charlottesville VA
Identified critical metabolic reactions of Leishmania major parasite. Worked with two peers to combine data into a metabolic network reconstruction.

Summer Intern

2004

American Biosystems, Inc., Roanoke VA

Performed market research and redesigned company website. Presented test of new product line against competing products at Carilion Biomedical Institute (CBI) Business Plan Competition. Received \$10,000 award and CBI office space.

FELLOWSHIPS AND AWARDS

First Place Student Paper	2014
Knowledge Discovery and Data Mining Working Group (KDDM-WG)	
Finalist	2014
AMIA 2014 Student Paper Competition	
UCLA Graduate Student Researcher	2012 - Present
NLM Biomedical Informatics Training Fellowship	2008 - 2012
NIH Postbaccalaureate Intramural Research Training Award	2006 - 2008

PROFESSIONAL ACTIVITIES

Memberships

Student Member, American Medical Informatics Association (AMIA) 2011-Present

Editorial Services

Student Reviewer, American Medical Informatics Association (AMIA) 2012-Present

PUBLICATIONS

RESEARCH PAPERS: PEER REVIEWED

Singleton KW, Speier W, Bui AAT, et al. Motivating the Additional Use of External Validity: Examining Transportability in a Model of Glioblastoma Multiforme. AMIA Annu Symp Proc 2014.

Singleton KW, Bui AAT, Hsu W. Transfer and transport: incorporating causal methods for improving predictive models. J Am Med Inform Assoc 2014; amiajnl-2014-002968. doi:10.1136/amiajnl-2014-002968

Singleton KW, Hsu W, Bui AAT. Comparing Predictive Models of Glioblastoma Multiforme Built Using Multi-Institutional and Local Data Sources. AMIA Annu Symp Proc 2012; 2012: 1385-1392.

Singleton KW, Lan M, Arnold C, Vahidi M, Arangua L, Gelberg L, Bui AAT. Wireless Data Collection of Self-administered Surveys using Tablet Computers. AMIA Annu Symp Proc. 2011; 2011:1261-9.

ORAL PRESENTATIONS

Singleton KW*, Speier W, Bui AAT, et al. Motivating the Additional Use of External Validity: Examining Transportability in a Model of Glioblastoma Multiforme. AMIA Annual Symposium, Washington, DC; November 2014.

Singleton KW*, Hsu W, Bui AAT. Comparing Predictive Models of Glioblastoma Multiforme Built Using Multi-Institutional and Local Data Sources. AMIA Annual Symposium, Washington, DC; November 2012.

Singleton KW*, Lan M, Arnold C, Vahidi M, Arangua L, Gelberg L, Bui AAT. Wireless Data Collection of Self-administered Surveys using Tablet Computers. AMIA Annual Symposium, Washington, DC; November 2011.

Singleton KW*, Lan M, Arnold C, Vahidi M, Arangua L, Gelberg L, Bui AAT. Wireless Data Collection of Self-administered Surveys using Tablet Computers. Annual National Library of Medicine Trainee Meeting, Washington DC, June 2011.

ABSTRACTS/POSTERS

Singleton KW, Garcia-Gathright JI, Burns B, Rocks K, Iglesias JE, Bui AAT, Aberle D. Semi-automated Medical Text and Image Selection for Multimedia Presentation at Tumor Board Reviews. 2009 Radiological Society of North America Conference, Education Exhibit, Invited December 2009, Chicago, Illinois.

Singleton KW, Schaewe TJ, Boscardin WJ, Luby M, Warach S, Kidwell CS, Alger JR. Representation of the NIH Stroke Scale with Probabilistic Diffusion Weighted Imaging Lesion Atlas. 2008 International Society of Magnetic Resonance in Medicine Conference, Oral Presentation, Invited May 2008, Toronto, Canada.

Kidwell CS, **Singleton KW**, Schaewe TJ, Luby M, Warach S, Alger JR. For the NIH Natural History of Stroke Investigators. Neuroanatomic Representation of NIHSS Sub-items Employing Acute Diffusion Imaging: Developing a Predictive Atlas of Clinical Outcome. 2008 International Stroke Conference, Poster Presentation, Invited February 2008, New Orleans, Louisiana.

TEACHING

GUEST LECTURER

BME 220 – Introduction to Medical Informatics	Fall 2012
BME 223A – Programming Laboratory for Medical Informatics I	Fall 2013

READER

BME 223A - Programming Laboratory for Medical Informatics I	Fall 2013
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