

KYLE W. SINGLETON

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SUMMARY

Biomedical Engineering PhD with focus in biomedical informatics and disease modeling. Experience leading a team in program design, implementation, and deployment and facilitating communication between engineering, health sciences, and clinical personnel.

EDUCATION

University of California, Los Angeles

Doctor of Philosophy, Biomedical Engineering

Dissertation: Establishing methods for prognostic graphical model adjustment across observational cohorts

Advisors: Alex A.T. Bui and William Hsu

Los Angeles, CA

June 2016 (Expected)

University of Virginia

Bachelor of Science, Biomedical Engineering

Minor: Computer Science

Charlottesville, VA

May 2006

PROFESSIONAL EXPERIENCE

Graduate Student Researcher

2012 - Present

UCLA Medical Imaging Informatics, Los Angeles, CA

- Supervised graduate student team, reviewing 500+ cancer cases for prognostic disease model evaluations.
- Implemented novel techniques for generalizing models between public and local data domains.

National Library of Medicine Fellow

2008 - 2012

UCLA NLM Medical Imaging Informatics Training Program, Los Angeles, CA

- Programmed and supported a tablet based system used to survey 10,000+ patients in three Los Angeles clinics.
- Developed an interface for patient case summarization, automating teaching module creation for clinical reviews.
- Completed coursework in medical informatics, statistics, and machine learning.

Post-baccalaureate Fellow

2006 - 2008

National Institutes of Health, Bethesda, MD

Section on Stroke Diagnostics and Therapeutics, NINDS

- Designed new imaging workflow, accelerating availability for stroke research tasks.
- Developed a MRI stroke atlas composed of 100 patient cases.

Undergraduate Researcher

2005 - 2006

Computational Systems Biology Lab, Charlottesville VA

- Collaborated with two students to create metabolic network reconstruction of Leishmania major.

SKILLS

Programming Languages: C++, Java, R, C#, ASP.NET, MATLAB, PHP, IDL

Informatics Tools: MATLAB, R, SPSS, RapidMiner, Weka, GENIE

Medical Data Standards: DICOM, HL7, XML, OWL, UMLS, HIPAA

PUBLICATIONS (2 OF 6)

Singleton KW, Speier W, Bui AAT, Hsu W. Motivating the additional use of external validity: examining transportability in a model of glioblastoma multiforme. AMIA Annu Symp Proc. 2014;2014:1930–9.

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