KYLE W. SINGLETON

Los Angeles, CA
(540) 798-8372
kwsingleton@ucla.edu

SUMMARY

Biomedical Engineering PhD with focus in medical informatics and disease modeling. Experience leading a team in program design, implementation, and deployment and facilitating communication between engineering, medical, and clinical personnel. Proficient at data cleaning and model creation with R; Past experience with additional statistics packages such as MATLAB and SPSS.

EDUCATION

University of California, Los Angeles   Los Angeles, CA
Doctor of Philosophy, Biomedical Engineering   July 2016
Dissertation: Investigating Predictive Disease Model Transportability through Cohort Simulation and Causal Analysis
Advisors: Alex A.T. Bui and William Hsu

University of Virginia   Charlottesville, VA
Bachelor of Science, Biomedical Engineering   May 2006
Minor: Computer Science

PROFESSIONAL EXPERIENCE

Graduate Student Researcher   2012 - 2016
UCLA Medical Imaging Informatics, Los Angeles, CA
- Supervised graduate student team, reviewing and cleaning 500+ brain cancer cases for predictive modeling.
- Evaluated a novel simulation technique for interpreting the external validity of models between patient cohorts.
- Processed cancer data from public repositories (National Lung Screening Trial, The Cancer Genome Atlas).

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.
- 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 100 patient case MRI stroke atlas.

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: R, Java, C#, ASP.NET, MATLAB, C++
Informatics Tools: R, SPSS, MATLAB, RapidMiner, Weka, GENIE
Medical Data Standards: DICOM, XML, HIPAA

SELECTED 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, 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