

BIOGRAPHICAL SKETCH

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NAME: King, Andrew

eRA COMMONS USER NAME (credential, e.g., agency login): kingaj1991

POSITION TITLE: NLM Postdoctoral Fellow

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	END DATE MM/YYYY	FIELD OF STUDY
University of Pittsburgh, Pittsburgh, PA	BS	04/2013	Bioinformatics
University of Pittsburgh, Pittsburgh, PA	MS	04/2015	Biomedical Informatics
University of Pittsburgh, Pittsburgh, PA	PHD	08/2018	Biomedical Informatics
University of Pittsburgh, Pittsburgh, PA	Postdoctoral Fellow	present	Critical Care Informatics

A. Personal Statement

I am Andrew Joseph King, a dedicated learner, a passionate futurist, and an energetic researcher. I strive to create a world where everyone has access to high-quality health care. To realize this vision, researchers must translate cutting-edge, life-saving treatments to practice, and must develop innovative technologies that improved care and lower costs. I have dedicated my last twelve years of study to gain skills and position myself for developing machine learning and artificial intelligence solutions that work in partnership with care providers, to complement their abilities and meet their information needs. As a post-doctoral scholar in critical care informatics, I am pushing towards my vision through the development, evaluation, and translation of a learning electronic medical record (LEMR) system and of a voice-interactive virtual assistant (Aviva) for the ICU care team.

B. Positions and Honors**Positions and Employment**

2013 - 2016 NLM Predoctoral Fellow, University of Pittsburgh, Pittsburgh, PA
 2016 - 2018 Graduate Student Researcher, University of Pittsburgh, Pittsburgh, PA
 2018 - NLM Postdoctoral Fellow, University of Pittsburgh, Pittsburgh, PA

Other Experience and Professional Memberships

2013 - Member, American Medical Informatics Association (AMIA)
 2015 - 2015 Co-director, CoSBBI Summer Research Program for High School Scholars
 2015 - 2015 Intern, Center for Health Informatics for the Underserved
 2015 - 2015 Health Innovators Fellow, Jewish Healthcare Foundation
 2017 - 2017 Health Innovators Fellow, Jewish Healthcare Foundation

Honors

2015 Student Paper Competition 1st Place, AMIA Annual Symposium
 2015 Best Student Poster, Department of Biomedical Informatics (DBMI) Annual Retreat
 2016 Best Student Paper, DBMI Annual Retreat
 2017 Student Paper Competition 1st Place, AMIA Joint Summits
 2017 Best Student Paper, DBMI Annual Retreat
 2018 Nominated for Distinguished Paper, AMIA Annual Symposium

C. Contribution to Science

1. Learning electronic medical record (LEMR) systems. Poor usability of EMR systems is detrimental to both providers and patients. For my dissertation, I developed and evaluated a context-aware EMR system called LEMR. A LEMR uses machine learning, to adapt the display of patient data, based on observations of clinician information seeking behavior.
 - a. King AJ, Cooper GF, Hochheiser H, Clermont G, Hauskrecht M, Visweswaran S. Using Machine Learning to Predict the Information Seeking Behavior of Clinicians Using an Electronic Medical Record System. AMIA Annu Symp Proc. 2018;2018:673-682. [nominated for best paper]
 - b. King AJ, Hochheiser H, Visweswaran S, Clermont G, Cooper GF. Eye-tracking for clinical decision support: A method to capture automatically what physicians are viewing in the EMR. AMIA Jt Summits Transl Sci Proc. 2017;2017:512-521. PubMed PMID: [28815151](#); PubMed Central PMCID: [PMC5543363](#). [best student paper]
 - c. King AJ, Cooper GF, Hochheiser H, Clermont G, Visweswaran S. Development and Preliminary Evaluation of a Prototype of a Learning Electronic Medical Record System. AMIA Annu Symp Proc. 2015;2015:1967-75. PubMed PMID: [26958296](#); PubMed Central PMCID: [PMC4765593](#). [best student paper]

2. Computer Science, Biology, and Biomedical Informatics (CoSBBI). In 2015, I was the co-director of the CoSBBI site of the UPMC Hillman Cancer Center Academy, a summer research program for high school scholars.
 - a. King AJ, Fisher AM, Becich MJ, Boone DN. Computer Science, Biology and Biomedical Informatics academy: Outcomes from 5 years of Immersing High-school Students into Informatics Research. J Pathol Inform. 2017;8:2. PubMed PMID: [28400991](#); PubMed Central PMCID: [PMC5359992](#).
 - b. Uppal R, Mandava G, Romagnoli KM, King AJ, Draper AJ, Handen AL, Fisher AM, Becich MJ, Dutta-Moscato J. How can we improve Science, Technology, Engineering, and Math education to encourage careers in Biomedical and Pathology Informatics?. J Pathol Inform. 2016;7:2. PubMed PMID: [26955500](#); PubMed Central PMCID: [PMC4763503](#).