Omoju Miller

Professional Experience

Google.org, San Francisco, CA Feb 2013 - till present
Technology Portfolio Manager.
CSEd Specialist, co-leading non-profit investment in Computer Science Education, helping
entrepreneurs launch new solutions to old problems at scale.

UniversityNow, San Francisco, CA June 2012 August 2012
Software Engineer Intern
Semantic Data Scientist. Led a team to design and create a data analytics console to improve
business intelligence and illuminate how students are progressing on the learning platform.

TEDxEuclidAve Berkeley, CA August 2011 August 2012
Founder and Curator
Led the planning of TEDxEuclidAve 100+ member conference, which brings together inno-
vative thinkers across technology, design and entertainment in service of social entrepreneur-
ship.

Miller Dental Health, Inc. Memphis, TN June 2004 December 2009
Consultant
Aided the development of Dentist recruitment strategies. Responsible for branding of busi-
ness including marketing and operations.

Thoughtware Learning Technologies, Inc. Memphis, TN August 1999 November 2001
Software Engineer
Contributed to the development of Internet based workforce development management sys-
tem.

Honors

Bloomberg Beta Future Founder
Co-Founder, #ThisIsGrit, winning hackathon project for the "White House + Dept of Ed"
Selected Interviewee, 2014 PBS Teach Roadtrip Nation
Kapor Capital Fellow
Selected Attendee, TEDxSummit, Qatar
SESAME Graduate Division Fellowship, UC Berkeley
Herff College of Engineering fellowship, University of Memphis August 2002 - May 2006

Education

University of California at Berkeley. Berkeley, California
Doctoral Degree in Computer Science Education (SESAME)
August 2010 - Present

University of Memphis. Memphis, Tennessee
Master of Science in Electrical Engineering: Focus in Computer Science and Intelligent Systems
Jan 2002 - August 2004

University of Memphis. Memphis, Tennessee
Bachelor of Science in Computer Science August
1997 August 2001

Research Experience

The University of California, Berkeley
Graduate Student Researcher
HipHopathy, January 2012 - Present
Designing an innovative approach to Data Science as a means of broadening participation in Computing. The goal of the HipHopathy project is to marry natural language processing, data, and conceptual metaphor theory to gain delightful insights into cognition. (Advisor: Alice Agogino, Dan Garcia)

The International Computer Science Institute
Graduate Student Researcher
MetaNet, February 2011 - December 2013
Co-designed and implemented a Semantic MediaWiki System to capture and model conceptual metaphors that can be queried to derive additional knowledge in English. This framework was then applied to other languages including Spanish, Farsi and Russian. (Advisor: Srini Narayanan)

The University of California, Berkeley
Graduate Student Researcher
CARES, June 2010 - December 2010
Assisted in the design and actualization of innovation workshop on user needs assessment for renewable energy of eco-friendly homes for the Pinoleville Pomo Indian nation, Ukiah, CA. Co-Design of educational workshop to teach the basics of renewable energies to Pomo youth. (Advisor: Alice Agogino)

The University of Memphis
Graduate Student Researcher

Data Visualization in High School Pedagogy, January 2005 - May 2006
Research funded by the National Science Foundation for the creation of an interdisciplinary workshop for requirements elicitation, design, and development of multidimensional visualization tools for recruitment of high school students in the fields of engineering, physics, math, and computer science. Assisted with curriculum development for Data Visualization course. Committee advisor for Data Visualization group. (Advisor: David Russomanno)

The University of Memphis
Graduate Student Researcher
Center for Advance Sensors, August 2004 - May 2006
Co-created the Web 3.0 Semantic Web Ontology Language (OWL) Sensor ontology OntoSensor. Developed ontology-based architecture for sensor discovery and query. The ontology and architecture is the first of its kind to be created on the Semantic Web. It is used by the Department of Defense and had immediate application to military intelligence. (Advisor: David Russomanno)

The University of Memphis
Graduate Student Researcher
Semantic Web Expert System (SWEXSYS), August 2003 - August 2004
Created and developed the SWEXSYS expert system engine using SWI-Prolog. It is a semi-autonomous system that is used as a decision support system for the identification of potentially hostile environments based on sensor data. (Advisor: David Russomanno)

Teaching Experience

The University of California, Berkeley Berkeley, California.
Graduate Student Instructor
Cog Sci 1, Introduction to Cognitive Science. Spring 2013
CS 9F, Introduction to C++ Programming. Spring 2011

The University of Memphis Memphis, Tennessee.
Adjunct Faculty
EECE 1207 - Introduction to C Programming. Fall 2009, Spring 2010

The University of Memphis Memphis, Tennessee.
Teaching Assistant
EECE 3220, Computer Software Engineering. Spring 2006
EECE(COMP) 4/6731, Data Visualization. Spring 2005, Fall 2005
EECE 1208, Introduction to Computer Engineer Lab. Fall 2003, Spring 2004

Publications

O.Miller (2014) Its deeper than rap, toward culturally responsive CS, XRDS: Crossroads, The ACM Magazine for Students, New York, NY, pp. 28-30.

O.Miller (2013) Winning with both sides of the coin, Coding Nation Report, Kapor Center for Social Impact, Oakland CA, pp. 6-7.

D.J. Russomanno, C. Kothari and **O. Thomas**[1] (2005) Building a sensor ontology: A practical approach leveraging ISO and OGC models, The 2005 International Conference on Artificial Intelligence, Las Vegas, NV, pp. 637-643.

D.J. Russomanno, C. Kothari and **O. Thomas** (2005) Sensor ontologies: from shallow to deep models, Proceedings of the 37th Southeastern Symposium on Systems Theory, IEEE Press, Tuskegee, AL, pp. 107-112.

O. Thomas and D.J. Russomanno (2005) Applying the semantic web expert system shell to sensor fusion using dempster-shafer theory, Proceedings of the 37th Southeastern Symposium on Systems Theory, IEEE Press, Tuskegee, AL, pp. 11-14.

O.A. Thomas and D.J. Russomanno (2004) SWEXSYS: A Semantic Web Expert System Shell, Proceedings of the IASTED International Conference on Artificial Intelligence and Applications, part of the 23rd Multi-Conference on Applied Informatics, Innsbruck, Austria, pp. 240-245.

O. Thomas (2004) Semantic Web Expert System (SWEXSYS) Shell. Masters thesis, University of Memphis, Tennessee. Print.

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[1]I published under Omoju Thomas