

DEZON K. FINCH, PhD
Curriculum Vita

PROFESSIONAL ADDRESS

Health Science Specialist
HS&RD/RR&D Center of Innovation for Disability and Rehabilitation Research
8900 Grand Oak Circle, Tampa, FL 33637
(813)558-3906 (Office)
(813) 558-7616 (Fax)
Dezon.Finch@va.gov

EDUCATION

PhD MIS	University of South Florida	12/2012
MS MIS	University of South Florida	08/2004
BA Management	Eckerd College	01/2002
AA Liberal Arts	City College of Chicago	01/1986

PROFESSIONAL EXPERIENCE

Health Science Specialist, James A. Haley VA Hospital – Consortium for Health Informatics Research, Tampa FL 9/08 - present
Sales Engineer/Manager, Digital Video Systems, Tampa, FL, 4/00-8/02
Systems Engineer/Director of Operations, South Western Communications, Sanford, FL 7/95-4/00
Senior Administrator, Technology Planning & Implementation, Orange County Public Schools, 1/90-7/95
Systems Analyst/Engineering Department Head/Instructor, US Navy, Various duty stations, 10/79-11/89

TEACHING EXPERIENCE

Systems Analysis and Design
Database Design and Administration
Information Systems in Organizations
Navy Motion Picture Editing School

RESEARCH INTERESTS

- Using Machine Learning to Improve Healthcare for Veterans
- Information Retrieval/Text mining on Medical Progress Notes
- Natural Language Processing/Information Extraction from Medical Progress Notes
- Media Choice, how and why managers choose one medium over another
- Experimental Information/Prediction Markets
- Effects of Information Systems on Society and the Individual
- Using technology to enhance the learning process

FUNDED RESEARCH ACTIVITY

SDR HIR 09-002 – (Samore) 2009-2013

VA HSR&D

Title: Consortium for Healthcare Informatics Research (CHIR)

Description/Goals of Project: The CHIR is comprised of a multi-disciplinary group of collaborating investigators affiliated with VA sites distributed across the US. The mission of the CHIR is to improve the health of veterans through foundational and applied informatics research. The primary purpose of the research is to advance the effective use of unstructured text and other types of clinical data in the electronic health record.

Role: Co-Investigator

IIR 05-120-3 (Luther) 2008-2010

Using Knowledge Discovery Strategies to Identify Fall-Related Injuries

Description/Goals of Project: Compare the ability of knowledge discovery in databases techniques (regular expression-based pattern matching and text mining) to identify fall-related injuries three types of data (text-based notes alone, text-based notes plus information from administrative data, and text-based notes plus information from chart review).

Role: Co-Investigator

VA HSR&D/RR&D (Mann) 2013-2018

Amount: To be determined

Center of Innovation on Disability and Rehabilitation Research, VISN 8 (CIDRR8)

Description / Goals of Project: This multi-institutional CIDRR8 engages in research to develop strategies for improving rehabilitation services and the long term

management of disability including issues that impact family members, for Veterans of all ages with central nervous system disorders/injuries. The research focus of CIDDR8 is community (re)integration, informatics and measurement, and technology.

Role: Co-Investigator

SDR HIR 09-002 (Samore) 2009-2013

VA HSR&D

Amount:\$1,244,475

FTEE: 6 calendar months

Consortium for Healthcare Informatics Research (CHIR)

Description/Goals of Project: The CHIR is comprised of a multi-disciplinary group of collaborating investigators affiliated with VA sites distributed across the US. The mission of the CHIR is to improve the health of veterans through foundational and applied informatics research. The primary purpose of the research is to advance the effective use of unstructured text and other types of clinical data in the electronic health record.

Role: Co-Investigator

RRP 12-450 (McCart)

2013-2014

VA QUERI

FTEE: 0.6 calendar months

Amount: \$149,950

Title: Using Information from the EHR to Monitor Adherence to mTBI Practice Guidelines

Description/Goals Project: Traumatic Brain Injury (TBI) is referred to as the “signature injury” of modern warfare due to the types of explosives used and the improved survivability of those injured in combat. The VA/DoD Clinical Practice Guideline for Management of Concussion/Mild Traumatic Brain Injury was created to assist clinicians in providing care for patients with mTBI. While the VA electronic health record contains information about adherence to this guideline, much of it is stored in text-based documents and is not easily extracted or summarized. This study explores the potential of natural language processing to extract and interpret essential information about guideline adherence.

Role: Co-Investigator

XVA 95-002 (Bulat)

2012-2014

VA NCPS

Description/Goals of Project: This center serves as a translation vehicle, developing clinical tools and products to facilitate implementation of research into practice. The goals of this study are to develop methods using machine learning and Natural Language Process that will extract information from medical progress notes that will be used to evaluate the adherence to clinical practice protocols for patients who have suffered a fall in the hospital.

Role: Co-Investigator

IIR-12-064 (Luther)

2013-2016

Leveraging Information in the EHR to Measure Pressure Ulcer Risk in Veterans with SCI

Description/Goals of Project: Pressure ulcers (PrU) are among the most significant

complications in Veterans with spinal cord impairment (SCI) in terms of quality of life and cost of care. The goal of this 3-year healthcare informatics study is to leverage structured and unstructured (text) data available in the VA electronic health record to develop SCI specific risk models that can be used to better identify risk for PrUs and target prevention strategies, thereby reducing the burden of this condition on Veterans.

Role: Co-Investigator

PUBLICATIONS

- McCart JA, Berndt D, Jarman J, Finch DK, and Luther SL (2013). Finding Falls in Ambulatory Care Clinical Documents Using Statistical Text Mining. *Journal of the American Medical Informatics Association*, 20, 906-914. doi:10.1136/amiajnl-2012-001334.
- Finch DK, Berndt D, and Luther SL (2012). Extracting Semi-Structured Text Elements in Medical Progress Notes: A Machine Learning Approach. AMIA 2012 Annual Symposium, November 3-7, Chicago, IL.
- Finch D, Divita G. Using String Distance to Detect Structure in Medical Documents. In: AMIA Symposium. Washington DC: JBM; 2011. p. 1763.
- Divita G, Finch D, South BR, Shuying S, Jarman J, Qin Y. A Medical Document Text Element Ontology. In: JBM, editor. AMIA Annual Symposium. Washington DC: BMJ; 2011. p. 1744.
- Luther S, Finch D, Berndt D, Hickling E, Richardson M, Hickam D. Using Statistical Text Mining to Supplement the Development of an Ontology. In: JBM, editor. AMIA Annual Symposium. Washington DC: JBM; 2011.
- Luther S, Berndt D, Finch D, Richardson M, Hickling E, Hickam D. Using Statistical Text Mining to Supplement the Development of an Ontology. *Journal of Biomedical Informatics* 2011.
- McCart JA, Berndt D, Finch DK, Jarman J, and Luther SL (2012). Using Statistical Text Mining to Identify Falls in VHA Ambulatory Care Data. AMIA 2012 Annual Symposium, November 3-7, Chicago, IL.
- Gobbel G, Reeves R, Jayaramaraja S, Eden S, FitzHenry F, Speroff T, Brown S, Luther S, Zirkle M, Finch D, McCart J, Matheny M (2012). Evaluation of the RapTAT Automated Annotation System for Identifying Post-Traumatic Stress Disorder-Related Concepts in Clinical Notes. AMIA 2012 Annual Symposium, November 3-7, Chicago, IL.
- McCart JA, Finch DK, Jarman J, and Luther SL (2012). Identifying Fall-Related Injuries Using Statistical Text Mining: A Preliminary Analysis. Health Services Research and Development (HSR&D) National Meeting, July 16-19, National Harbor, MD.
- Berndt D, Finch D, Foulis P, Luther S. The Impact of Data and Target Quality in Text Mining Clinical Notes. In: AMIA Annual Symposium. Washington DC: JBM; 2010.

- McCart JA, Finch DK, Jarman J, Hickling E, Lind JD, Richardson MR, Berndt DJ, and Luther SL (2012). Using Ensemble Models to Classify the Sentiment Expressed in Suicide Notes. *Biomedical Informatics Insights*, 5(Suppl. 1), 77-85.
- Donald J. Berndt, Joni L. Jones, Dezon Finch and Areej Yassin, "Milestone Market: Software Cost Estimation through Market Trading," *JMIS*, Pending rewrite.
- Dezon Finch and Donald Berndt, "Understanding Trader Heterogeneity in Information Markets," *Journal of Systems and IT*,

REFEREED PROCEEDINGS AND PRESENTATIONS

- D. Berndt, R. Collins, J. Jones, D. Finch, and A. Yassin, "Workshop on Information and Prediction Markets," *Proceedings of the Global Information Technology Management Association (GITMA) World Conference*, Orlando, Florida, June 11-13, 2006. This was a 1.5 hour workshop, including an overview of information markets and current results from the USF milestone market.
- Donald J. Berndt, Joni L. Jones, and Dezon Finch, "Milestone Market: Software Cost Estimation through Market Trading," *Proceedings of the 39th Hawaii International Conference on System Sciences (HICSS 39)*, January 4-7, 2006.
- Dezon Finch and Donald Berndt, Understanding Trader Heterogeneity in Information Markets, *Proceedings E-Commerce International Conference*, December 7 - 9, 2007. Outstanding Paper Award.

HONORS AND AWARDS

Best Poster Award, AMIA, 2012 Washington DC
 Best Paper Award, E-Commerce2007 Conference, Portugal
 Phi Beta Kappa Honors Society, 2005
 "Better Than Ever" Award, Orange County Public Schools, 1997

PROFESSIONAL MEMBERSHIPS

- American Medical Informatics Association
- Association for Information Systems
- International Association for Development of the Information Society
- Association for Computing Machinery