Frances Chevonne Thomas Dancer, Ph.D.

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Professional Preparation

| Institution Major Degree & Year | | |
|---|------------|--------------------------------------|
| Jackson State University, Jackson, MS | B.S. 2003 | Computer Science |
| Mississippi State University, Mississippi State, MS | M.S. 2005 | Computer Science (advisor: Dr. David |
| Dampier) | | |
| Mississippi State University, Mississippi State, MS | Ph.D. 2012 | Computer Science (advisor: Dr. David |
| Dampier) | | |
| Appointments | | |

Institution Position Year Jackson State University Assistant Professor 2013 - present Jackson State University Instructor 2012 - 2013 Jackson State University Project Director, JSUAdvance 2011 - 2012 Department of Environmental Quality Programmer Analyst II 2009 - 2011 Graduate Research 2003 - 2009 Mississippi State University

Publications

Book:

[1] Dancer, Frances Chevonne, and David A. Dampier. A Platform Independent Forensic Process Model for Smartphones. Scholars Press, 2013.

Book Chapters:

- [1] Dancer, F, Chevonne, "Qualitative Analysis for Platform Independent Forensics Process Model (PIFPM) for Smartphones." In: Arai K., Kapoor S., Bhatia R. (eds) Advances in Information and Communication Networks. FICC 2018. Advances in Intelligent Systems and Computing, vol 887. Springer, Cham (2019)
- [2] Dancer, Frances Chevonne, David A. Dampier, et al. "A theoretical process model for smartphones." *Advances in Computing and Information Technology*. Springer, Berlin, Heidelberg, 2013. 279-290.
- [3] Dancer, F. Chevonne Thomas, and David A. Dampier. "A Platform Independent Process Model for Smartphones Based on Invariants." *Systematic Approaches to Digital Forensic Engineering (SADFE), 2010 Fifth IEEE International Workshop on*. IEEE, 2010.

Refereed Journals:

- [1] F. C. Dancer, "Determining Whether Android, iOS, RIM, WMD are Contagions," *Journal of Research in Higher Education Women RISE Special Edition 2:2 (2019)*
- [2] F. Chevonne Dancer, "First in the World: A Computer Science Perspective" (October 2017).
- [3] F. Chevonne Dancer, "Manual Analysis Phase for (PIFPM): Platform Independent Forensics Process Model for Smartphones," *International Journal of Cyber-Security and Digital Forensics 6:3* (2017):101 – 108.
- [4] Skelton, Gordon W., Jacqueline Jackson, and F. Chevonne Dancer. "Teaching software engineering through the use of mobile application development." *Journal of Computing Sciences in Colleges* 28.5 (2013): 39-44.
- [5] F. Chevonne Dancer and Dampier, David A, "Refining the Digital Device Hierarchy," Journal of the Academy of Sciences, Abstract Issue, vol. 55, no. 1, January, 2010.
- [6] **F. Chevonne Dancer** and Dampier, David A, "Refining the Digital Device Hierarchy," Journal of the Academy of Sciences, vol. 55, no. 4, October 2010.
- [7] Allen, Edward B., and F. Chevonne Thomas. "Modeling Software Security Requirements for Certification: A Case Study of Requirements based on the Common Criteria." SIMULATION SERIES 38.2 (2006): 504.

Refereed Conference Papers:

 F. Chevonne Dancer, "Visualizing Restored Android Memory for Analysis Using an XRY MSAB v8 Forensics Tool," The 14th International Workshop on Digital Forensics (WSDF 2021) (August 17 – 20, 2021) (in publication).

- [2] Jetnya Simmons*, April Tanner, F. Chevonne Dancer," Utilizing Machine Learning and Social Media in Natural Disaster Preparation, Response, and Recovery," The Symposium on Computing at Minority Institutions Machine Learning and Beyond (ADMI '21) (March 25 – 27, 2021).
- [3] Kayla Wilkes*, F. Chevonne Dancer," Determining Which Tool or Tool Combination is Best for Your Investigation," (Women RISE '19) (September 12, 2019)-Abstract.
- [4] Damian Patterson*, F. Chevonne Dancer," The New Generation of Device Forensics: Video Game Consoles," (Women RISE '19) (September 12, 2019)-Abstract.
- [5] Aiyanna Price*, F. Chevonne Dancer, April Tanner, "Detecting Threats Pre-Incident by Aggregating Data from Twitter and a News Source," The Symposium on Computing at Minority Institutions Blockchain Technologies- Association of Computer/Information Sciences and Engineering Departments at Minority Institutions (ADMI '19) (April 11-14, 2019).
- [6] F. Chevonne Dancer, "Qualitative Analysis for Platform Independent Forensics Process Model (PIFPM) for Smartphones," International Conference on Future of Information and Communications (FICC '17) SAI Conference (March 2018).
- [7] Tanner, April L, F. Chevonne T. Dancer, Whitfield, Nicholas*, Hart, Quavanti*," Detecting Threats by Aggregating Pre-Incident Data from Online Social Media," Abstract Issue: Journal of the Academy of Sciences, vol. 61, no. 1, Jan. 2017, p. 116.
- [8] Tanner, April L, F. Chevonne T. Dancer, Whitfield, Nicholas*, Hart, Quavanti*," Detecting Threats by Aggregating Pre-Incident Data from Online Social Media", USM 2017
- [9] F. Chevonne T. Dancer, Tanner, April L., Michael Stevens*, TyMia Jackson*, Jeremiah Burns*," Social Media Network Assistance For Emergency Management", Washington D.C. 2016.
- [10] F. Chevonne Dancer, "Analyzing and Comparing Android HTC Aria, Apple iPhone 3G, and Windows Mobile HTC TouchPro 6850." *Computational Science and Computational Intelligence* (CSCI), 2016 International Conference on. IEEE, 2016.
- [11] F. Chevonne Dancer, and Gordon W. Skelton. "To change or not to change: That is the question." *Technologies for Homeland Security (HST), 2013 IEEE International Conference on*. IEEE, 2013.
- [12] (Poster) Evelyn Leggette, Loretta Moore, **F. Chevonne Dancer**, "Accelerating HBCU Women into Global Communities of Scholars" NSF ADVANCE, (November 2011).

Synergistic Activities

A. Presentations

- [1] **F. Chevonne T. Dancer**, "Visualizing Restored Android Memory for Analysis Using an XRY MSAB v8 Forensics Tool, Vienna, Austria, (Virtually) Aug. 17 20, 2021.
- [2] F. Chevonne T. Dancer, Mobile Device Forensics Summer Camp, Jackson State University, Jackson, MS, June 1, 2019.
- [3] Dancer, F. Chevonne, 2nd year: First in the World: Smartphone Forensics Team, 2017 2018
- [4] Dancer, F. Chevonne, 1st Year: First in the World: Computer Literacy, 2016 2017
- [5] **Dancer, F. Chevonne**, "Fourth Cohort of the Academy for Research and Scholarly Engagement Academy", Jackson State University (JSU), Jackson, MS, April, 2016.
- [6] Dancer, F. Chevonne, "A Platform Independent Process Model for Smartphones", B. Thomas Golisano College of Computing and Information Sciences, Department of Networking and Information Security, Rochester Institute of Technology (RIT), Rochester, NY, September 29, 2011.
- [7] Dancer, F. Chevonne, "Smartphone Forensics", Gitam University, Hyderabad, India, July 27, 2011.
- [8] **Dancer, F. Chevonne**, "*JSUAdvance*", External Advisory Board Meeting, The School of Engineering, Department of Computer Science, Jackson State University (JSU), Jackson, MS, August, 2011.

B. Professional Activities

- International Committee IJHSS '17 '18; Editor, SPRG Journals '17 '18; Reviewer, IEEE 2017 HST; IJCSES 2017; IJCSDF 2017; National Science Foundation, Ad Hoc Committee, (June 2019), National Science Foundation, BPC Panel Review Committee, (November 2018)
- Member, WHEMN 2017; National Society of Black Engineers (NSBE), 2012 present; Women in Science and Engineering (WISE), 2012 – present; IEEE, 2012 – present; Computer Science Departmental SPICES Committee, Jackson State University, Jackson, MS, 2011-2014; Mississippi Academy of Sciences (MAS), 2009 – 2010, 2016; Upsilon Pi Epsilon Information and Computing Honor Society, 2003; Association of Computing Machinery (ACM), 2001 – present; Zeta Phi Beta Sorority, Inc., 2000 – present.
- Attendee, BEYA Conference, 2012-2013,2015; NSBE Conference, 2012-2013; Jackson State University's NSF Day, 2012;
- 4. JSU Service

a. Graduate Faculty Member since 2014; ACM Chair '17-'present; CSC 115 Curriculum Committee, Co- chair '17; Search Committee, JSU Pageant '17-'18; Emergency Management Technology Program - TyMia Jackson, Jeremiah Burns, Michael Stevens '15 - '16; Nicholas Whitfield, Quavanti Hart '16 - '17; ACM and ACM-W Co-Lead '16; FITWP Team Leader '16; JSU Distance Learning Implementation Team member, 2013 – 2014; Massie Chair co-supervisor, Graduate Cyber-Security Research (TyMia Jackson, Rashad Evans, Bernard Aldrich Jr.), 2012; Presenter, Cyber Security Day, 2012; Volunteer, CSET Under the Stars, 2012; Participant, 20th SREB Compact for Diversity, 2012; Camp Pioneer, 2011 – 2012; Media Specialist, Mississippi Regional Science Fair, 2011 – 2013, Jackson State University's' Computer Science Facebook Page 2013 – present; Lecturer and Participant, Future Faculty Career Exploration Program (FFCEP).

5. Awards/Scholarships

a. Fourth Cohort of the Academy for Research and Scholarly Engagement 2015 - 2016; Professor of the Game, JSU vs. Texas Southern 2015; HEADWAE Nominee '16; Jackson State University, Recognition of 5 years Dedicated Service, May 13th, 2016; Recipient, NASA MSGC Fellowship, 2006; Swalm-JSU Engineering Scholarship Endowment, 2006; Southern Regional Education Board Fellowship (SREB), 2003; Scholar, Alliance for Graduate Education in Mississippi, 2001; Legislative Page for Rep. Miriam Simmons, 1998.

Proposals Accepted

- [1] Senior Personnel ERDC \$299,999,999, August 2020 July 2023, US Army Corps of Engineers, Engineer Research & Development Center
- [2] Senior Personnel –JSU Females Advancing in Science & Technology (FAST), \$399,999, July 2020 – June 2023, National Science Foundation
- [3] Principal Investigator (PI), Excellence in Research: Teaching Problem-Solving and Deductive Skills toK12 Students Through a Forensics Course Based on Mobile Devices, \$299,999, Sept. 2018
 - Aug. 2022, National Science Foundation
- [4] Senior Personnel First in the World Multidisciplinary Engagement Team, June 2016 May 2019, \$2,980,000, Department of Education
- [5] Co-Principal Investigator (Co-PI), Enhancement of the Emergency Management Technology Program at Jackson State University, Dept. of Homeland Security, \$1,000,000, Oct. 2014 – Sept. 2021.
- [6] Senior Personnel Massie Chair in Cyber Security, \$500,000, October 1, 2013 September 30, 2015
- [7] Senior Personnel, Students Promoting Interest in Computing Supported by Educational Scholarships, (SPICES) (2012 - 2014)