Dr. Bilal Abu Bakr

Department of Computer Science & Information Systems,
Texas A&M University-Commerce,
Commerce, TX 75428
E-mail: bilal.abu.bakr@tamuc.edu

EDUCATION

Jun. 2011	**Doctor of Philosophy (Ph.D.) in Computer Science** Western Michigan University – Kalamazoo, MI
Apr. 2006	**Master of Science (MS) in Computer Science** Western Michigan University – Kalamazoo, MI
Jul. 2003	**Masters of Science (MS) in Mathematics** Western Illinois University – Macomb, IL
Aug. 1995	**Masters of Science (M.Sc.) in Mathematics** University of the Punjab – Lahore

Certificate Courses

Jun. 2013	**Certificate in Learning through Interactivity** Florida State College – Jacksonville, FL

RESEARCH

Publications

1. B. Abu Bakr and L. Lilien, "A Quantitative Comparison of Energy Consumption and WSN Lifetime for LEACH and LEACH-SM,"*Proc. The Fourth Intl. Workshop on Sensor Networks (SN 2011), in conjunction with ICDCS 2011*, Minneapolis, MN, June 2011.

2. Bilal Abu Bakr, "LEACH-SM: A Protocol for Extending Wireless Sensor Network Lifetime by Management of Spare Nodes,"*Ph.D. Thesis, Western Michigan University*. Kalamazoo, MI, June 2011.

3. B. Abu Bakr and L. Lilien, "LEACH-SM: A Protocol for Extending Wireless Sensor Network Lifetime by Management of Spare Nodes,"*Proc. 3S Workshop (Wireless of the Student, by the Student, for the Student) in conjunction with WiOpt 2011*, Princeton, NJ, May 2011.

4. Bilal Abu Bakr, "LEACH-SM: A Protocol for Extending Wireless Sensor Network Lifetime by Management of Spare Nodes,"*5th WMU Research and Creative Activities Poster Day, Western Michigan University*, Kalamazoo, Michigan, April 2011.

5. B. Abu Bakr and L. Lilien, "Extending Wireless Sensor Network Lifetime in the LEACH-SM Protocol by Spare Selection," *Proc. The First Intl. Workshop on Advanced Communication Technologies and Applications to Intelligent Transportation Systems, Cognitive Radios and Sensor Networks (ACTICS 2011)*, Seoul, Korea, June-July 2011.

6. R. Vanderpuye and B. Abu Bakr, "Cybercrime: Understanding and Addressing the Concerns of Industries," *Department of Mathematics and Computer Science, Alcorn State University*, Lorman, MS, 2014.

7. B. Abu Bakr and L. Lilien, "Extending Lifetime of Wireless Sensor Networks by Management of Spare Nodes," *Proc. The 2nd International Workshop on Communications and Sensor Networks (ComSense-2014) in conjunction with the 9th International Conference on Future Networks and Communications (FNC-2014)*, Niagara Falls, Ontario, Canada, August 2014.

8. B. Abu Bakr and L. Lilien, "Comparison by Simulation of Energy Consumption and WSN Lifetime for LEACH and LEACH-SM," *Proc. The 9th International Conference on Future Networks and Communications (FNC-2014) in conjunction with the 11th International Conference on Mobile Systems and Pervasive Computing (MobiSPC'14)*, Niagara Falls, Ontario, Canada, August 2014.

9. B. Abu Bakr and D. Williams, "Enemy at the gate - threats to cloud computing security," *Proc. The Journal of the Mississippi Academy of Sciences*, Hattiesburg, USA, February 2016.

10. B. Abu Bakr and D. Hogland, "Online Interactions in the Era of Social Media," *Proc. The Journal of the Mississippi Academy of Sciences (Abstract)*, Hattiesburg, USA, January 2017.

11. B. Abu Bakr and U. Nagapuri, "Connectivity Constraints that Govern Internet Management," *Proc. The Journal of the Mississippi Academy of Sciences (Abstract)*, Hattiesburg, USA, January 2017.

12. D Kwon, I Jeong, G Yoon, B. Abu Bakr and K. P. Kim, "A Study on Probabilistic Schedule Estimation and Refinement of the Small and Medium-Sized Software Development Projects," *Proc. 10th International Conference on Computer and Automation Engineering (ICCAE 2018)*, Brisbane, Australia.

Grant Proposal

1. Donzell Lee, Bilal Abu Bakr and Ping Zhang, "Improving Student Success in STEM Foundation Courses," *The Association of American Colleges and Universities and Project Kaleidoscope (AAC&U/PKAL)*, January 2014.
2. Sony Rapid Alert System for Enhanced Night-vision (RASEN), October 2016
3. Faculty Research Enhancement Program (FREP), April 2017

Talks and Presentations

1. "Using Blackboard to create tests and surveys" at Arts and Sciences Seminar Series, *Alcorn State University*, October 2014.
2. "LEACH-SM: A Protocol for Extending Wireless Sensor Network Lifetime by Management of Spare Nodes," at 5th WMU Research and Creative Activities Poster Day, *Western Michigan University*, April 2011.
3. Mane Event Preview Day, *Texas A&M University-Commerce, October 2016*
4. Mane Event Preview Day, *Texas A&M University-Commerce, March 2019*

EMPLOYMENT RECORD

Academic Positions

Aug. 2016 – Present	Assistant Professor – Department of Computer Science & Information Systems, Texas A&M University-Commerce.

Aug. 2011 – Aug. 2016	Assistant Professor – Department of Mathematics and Computer Science, Alcorn State University.
Aug. 2006 – Dec. 2010	Doctoral Teaching Assistant – Department of Computer Science, Western Michigan University.
Aug. 2004 – Apr. 2006	Teaching Assistant – Department of Computer Science, Western Michigan University.
Jan. 2002 – May. 2003	Teaching Assistant – Department of Mathematics, Western Illinois University.
Jul. 2000 – Dec. 2001	Assistant Professor – Department of Mathematics, University of Management and Technology –Lahore.
Jun. 1995 – Jun. 2000	Lecturer – Department of Mathematics, University of Management and Technology –Lahore.

Non – Academic Positions

Aug. 2006 – Dec. 2008	Assistant to Finance Co-Chair, High Performance Computing (HiPC), Western Michigan University.
Aug. 2003 – May. 2004	Graduate Assistant – Technology Resource Center (COEHS), Western Illinois University.

Professional Activities

Apr. 2019 – Present	Member of Employee Appeals Committee, Texas A&M University-Commerce
Oct. 2018 – Present	**Chair** of Faculty Awards Committee Faculty Senate, Texas A&M University-Commerce
Oct. 2018 – Present	Member of Executive Committee of the Faculty Senate, Texas A&M University-Commerce
Jan. 2018 – Feb. 2018	Committee Member of International Symposium on Innovation in Information Technology and Application (ISIITA)
Sep. 2017 – Present	Member of Budget committee of the Faculty Senate, Texas A&M University-Commerce
Sep. 2017 – Present	Member of Faculty Senate Committee, Texas A&M University-Commerce
Sep. 2017 – Present	**Chair** of MS admission Committee, Department of Computer Science & Information Systems, Texas A&M University-Commerce
Sep. 2017 – Present	Member of Computer Science Federation Committee, Department of Computer Science & Information Systems, Texas A&M University-Commerce
Jan. 2017 – Present	Graduate Advisor
Jan. 2017 – Present	Program coordinators for MS in Computer Science
Jan. 2017 – Present	COMP Exam coordinators
Jan. 2017 – Present	Registration Coordinators for Graduate Students

Jan. 2017 – Present	Member of Student Outreach Ambassador Committee, Department of Computer Science & Information Systems, Texas A&M University-Commerce
Jan. 2017 – Present	Member of Curriculum Committee, Department of Computer Science & Information Systems, Texas A&M University-Commerce
Jan. 2017 – Present	Representative of Departmental library – (library liaison), Department of Computer Science & Information Systems, Texas A&M University-Commerce
Aug. 2016 – May. 2017	Member of Admission Committee, Department of Computer Science & Information Systems, Texas A&M University-Commerce.
Aug. 2016 – Present	Graduate Advisor of MS-Computer Science, Texas A&M University-Commerce
Aug. 2014 – Aug. 2016	Member of Photography Committee, Alcorn State University
Oct. 2013 – Aug. 2016	Member of Curriculum and Academic Affairs Committee, Alcorn State University Faculty Senate
Oct. 2013 – Aug. 2016	Member of Technology, Instructional Development, and Instructional Services Committee, Alcorn State University
Sep. 2013 – Aug. 2015	**Chair** of Curriculum Committee, Department of Computer Science, Alcorn State University
Sep. 2013 – Aug. 2016	**Chair** of Technology Committee, Alcorn State University
May. 2013 – Aug. 2016	Member of Faculty Senate Committee, Alcorn State University
May. 2013 – Aug. 2016	Member of Faculty Affair Committee, Department of Computer Science, Alcorn State University
Aug. 2011 – Aug. 2015	In charge of Course Assessment and Evaluation for undergraduate Computer Science courses for Southern Association of Colleges and Schools (SACS), Alcorn State University.
Aug. 2011 – Aug. 2015	In charge of Course Assessment and Evaluation for Accreditation Board for Engineering and Technology (ABET), Alcorn State University.

Service and Involvement in the Community

- Volunteer to judge the Technology-Related Creativity/Innovation category of the showcase 2016
- LIS Judging- Technology Category
- 2017 Federation Symposium. *Student participants
- 2018 ARS Schedule – Judges
- Judge Confirmation–Federation Graduate Student Research Symposium – Friday, March 31, 2017 at TWU
- Annual Research Symposium - 2018 A&M-Commerce Annual Research Symposium will take place on Tuesday, April 03, 2018 in the Rayburn Student Center
- Judge at the 2019 A&M-Commerce Annual Research Symposium

Other Activities

- Reviewer – Transactions on Parallel and Distributed Systems.
- Reviewer – Sensors, open access electronic journals, Multidisciplinary Digital Publishing Institute.
- Reviewer – Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications.
- Reviewer – Journal of Electrical Engineering & Electronic Technology.
- Reviewer – Elsevier@ElsevierConnect

Conference/Workshop Chair

- Co-Chair for the Division of Mathematics, Computer Sciences and Statistics, Mississippi Academy of Sciences, Jackson, MS 39296. 2016
- Local and invitation committee member of 2018 International Symposium on Innovation in information Technology and Application (ISIITA)

Students Research Supervision

1. Graduate Council Representative for a proposal defense of Adel Aldawsari, Spring 2019
2. Jessica Y.Covarrubias, Spring 2019
   Undergraduate student in the CSCI Department, TAMUC
3. Apelu A. McAllister, Spring 2019
   Undergraduate student in the CSCI Department, TAMUC
4. Stephen B. Harwell, Spring 2019
   Undergraduate student in the CSCI Department, TAMUC
5. Akshay Patel, Spring 2019
   MS student in the CSCI Department, TAMUC

6. Dylan Hogland, Fall 2016
   MS student in the CSCI Department, TAMUC

7. UshaSree Nagapuri, Fall 2016
   MS student in the CSCI Department, TAMUC

8. Darren Jones, Fall 2015
   MS student in the MACIS Department, ASU

9. Sahithi Akkinepally, Spring 2015
   MS student in the MACIS Department, ASU

10. Darren Jones, Spring 2015
    MS student in the MACIS Department, ASU

11. Sai Kiranmayi Kamma Nadimenti, Spring 2015
    MS student in the MACIS Department, ASU

12. Yaswanth Reddy Narasa Reddy, Spring 2015
    MS student in the MACIS Department, ASU

13. Canary Robinson, Spring 2015
    MS student in the MACIS Department, ASU

14. Kubbireddy Sree Harsha Reddy, Spring 2015
    MS student in the MACIS Department, ASU

15. Richard Vanderpuye, Fall 2014
    MS student in the MACIS Department, ASU

AWARDS AND HONORS

Apr. 2012	Excellence in Research Award.
Apr. 2011	Certificate in recognition of participation in the fifth annual Western Michigan University Research & Creative Activities Poster Day.
Apr. 2010	Department Teaching, Research and Support Assistant Recognition.
Apr. 2009	Department Teaching, Research and Support Assistant Recognition.
Feb. 2009	Certification of Appreciation for Dedication and Commitment to Quality Service as a Student Employee.
Apr. 2008	Departmental Assistant Award.
Apr. 2007	Teaching Effectiveness Award (Doctoral Level).
Apr. 2007	Departmental Assistant Award.
Apr. 2006	Teaching Effectiveness Award (Masters Level).
Apr. 2005	Teaching Effectiveness Award (Masters Level).
Feb. 2005	Certification of Appreciation for Dedication and Commitment to Quality Service as a Student Employee.
Aug. 1999	Best Teacher of the Year.
Aug. 1997	Best Teacher of the Year.

PROFESSIONAL MEMBERSHIP

- IEEE Communication Society
- **Committee Member** of International Symposium on Innovation in Information Technology and Application (ISIITA)