

Musa J Ja'far (Ph.D.)
Computer Information Systems Dept
College of Business
West Texas A&M University
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Academic Education:

- **Ph.D. in Systems Engineering**- University of Arizona, Tucson, AZ (1989). Dissertation Title: "A Tool for Interactive Verification and Validation of Rule-Based Expert Systems".
- **M.Sc. in Management Information Systems**- University of Arizona (1995). Report Title: "A Framework for Computer Aided Knowledge Engineering".
- **M.Sc. in Systems Engineering**- University of Arizona (1985).
- **M.Sc. in Mathematics**- American University of Beirut, Lebanon (1983). Thesis Title: "A Theoretical and Numerical Study of Poisson Equations in Two Dimensions".
- **B.Sc. in Mathematics**- Haigazain College, Beirut, Lebanon (1977).

Computing Skills:

- ***Information Systems Development:*** Processes, Architecture, Design, Object Oriented Analysis & Design, UML tools, End-to-End and hands-on distributed software applications development.
- ***Data Management:*** Data Mining and Business Intelligence, Database Applications Development (Oracle, MySQL, SQL Server), Data Visualization, Statistical Data Analysis, GIS Applications Development, Decision Support Systems.
- ***Programming Languages:*** Java, C, Perl, PHP, Servlets, Java Server Pages, Database Connectivity protocols, SQL and TCP/IP programming.

Academic Teaching Experience:

- **West Texas A & M University-CIS Department**, Canyon, TX (Jan 2004-present)
Assistant Professor of Computer Information Systems
Undergraduate Courses Taught: Data Mining Methods, Software Development in a Database Environment, Object-Oriented Analysis and Design , Object Oriented Programming in Java, Management Information Systems , Decision Support Systems and Business Statistics.
MBA Courses Taught: Database Development for Business Applications, Software Engineering and Systems Development, Information Systems Project Management.
- **University of Arizona-MIS Department** Seconded to the University of Sharjah; United Arab Emirates (Feb 2000-Jan 2004) *Visiting Associate Professor of Management Information Systems*
- **Washington State University-Management & Systems Department**, Pullman, WA (1991-1993)
Assistant Professor of Management Information Systems
- **University of Colorado at Denver**, Denver, CO 1997
Adjunct Faculty of Management Information Systems
- **University of Arizona**; Tucson, AZ (1984-1991).
Graduate Teaching Assistant

Professional Information Technology Experience:

- **International Business Machines (IBM)** - Cary, NC (June 1997 – Feb 2000)
Senior Software Engineer and Architect
- **US West Communications (Qwest Communications)** – Denver, CO (1995-1997)

Senior Software Engineer at the Information Technologies Division -

- **Bell Communications Research-** Piscataway, New Jersey (1993-1995)
Software Engineer at the Knowledge-Based Applications Development Group.

Refereed Journal Articles:

- Jafar, M. (2010). "A Tools-Based Approach to Teaching Data Mining Methods". *Information Systems Journal of Information Technology Education*, 9, IIP-9-24.
- Anderson R., Jafar M. and Rogers W. (2010, forthcoming). "Superfund Site Analysis Using Web 2.0 Technologies". *Journal of Information Systems Applied Research*.
- Jafar, M. & Abdullat A. (2009). "Exploratory Analysis of the Readability of Information Privacy Statements of the Primary Social Networks". *Journal of Business and Economics Research* 7(12).
- Anderson, R. & Jafar, M. (2009). "A Visual Approach to Exploratory Data Mining". *Review of Business Information Systems* 13(1), 1-13.
- Jafar, M. & Anderson, R. (2008). "Data Mining Methods Course for Computer Information Systems Students". *Information Systems Education Journal* 6(48), 1-12.
- Landram, F., Jafar, M. & Abdullat, A. (2008). "Combining Forecasts within the Multivariate C-Logistic: A Fresh Approach to Forecasting". *Southwestern Economic Review* 35(1), 243-253.
- Jafar, M., Anderson, R., & Abdullat, A. (2008). Comparison of Dynamic Web Content Processing Language Performance Under a LAMP Architecture. *Journal of Information Systems Applied Research* 1(1), 3-16.
- Jafar, M., Anderson, R. , & Abdullat, A. (2008). "Software Academic Initiatives: A Framework for supporting a Contemporary Information Systems Curriculum". *Information Systems Education Journal* 6(55), 1-13.
- Anderson, R., Jafar, M. , & Abdullat, A. (2007). "Teaching Scalability Issues in Large Scale Database Application". *Information Systems Education Journal*, 5(28), 3-14.
- Eltaha, M. & Jafar, M. (2006). "Characterization of the Departure Process in a Closed Fork-Join Synchronization Network". *Applied Mathematics and Computation Journal*, 181 (1), 214-219.
- Jafar, M. & Bahill, A. (1993). "Interactive Verification and Validation of Knowledge-Based Expert Systems". *IEEE Expert*. *IEEE Expert*, 8(1), 25-32.
- Jafar, M. , Bahill, A. , & Osborn, D. (1991). "A knowledge-base system for Heating, Ventilating and Air Conditioning". *ASHRAE Journal*.

Refereed Conference Proceedings:

- Anderson R., Jafar M. and Rogers W. (2009 forthcoming). "Superfund Site Analysis Using Web 2.0 Technologies". *Conference on Information Systems Applied Research* (complete paper).

Conference Presentations:

- *Information Systems Educator's Conference* (2009): "A Tools-Based Approach to Teaching Data Mining Methods".
- *Conference on Information Systems Applied Research* (2008): "Comparison of Dynamic Web Content Processing Language Performance under a LAMP Architecture".
- *Information Systems Educator's Conference* (2008): "Data Mining Methods Course for Computer

Information Systems Students”.

- *Information Systems Educator's Conference* (2007): “Software Academic Initiatives: A Framework for supporting a Contemporary Information Systems Academic Curriculum”.
- *Information Systems Educator's Conference* (2006): “Teaching Scalability issues in Large Scale Database Applications Development”
- *Academy of Business and Information Technology Conference* (2005): “A Methodology to Assess HTTP Server Scalability and Performance”

Refereed Book Chapters:

- Bahill, A., Jafar, M. , & Moller, R. (1991). “Tools for extracting knowledge and validating expert systems” . In Uma Gupta (Ed.) *Validation & Verification of Knowledge-Based Systems*, (pp. 164-169). CA: IEEE Computer Society Press.
- Jafar, M. & Bahill, A. (1990). “Validator, A Tool for Verifying and Validating Personal Computer Based Expert Systems”. In *Operations Research and Artificial Intelligence: The Integration of Problem-Solving Strategies*. D.E. Brown & C.C. White (Eds). Academic Publishers, Boston 1990. In Brown D.E. and White C.C. (Ed.) *Operations Research and Artificial Intelligence: The Integration of Problem-Solving Strategies*. Boston: Academic Publishers.

Abstracts Only:

- Rogers, W. J., Bickham, J. W. , Saxena, V., Anderson, R., Jafar, M. J. , Larry Chapagne, Appala N. Paila, (in press, 2008). “Development of User-Interactive Default and Site Specific Ecological Regulatory Benchmark Generator”. *SETAC Europe 18th Annual Meeting*.

Grant Activities and White Papers:

- 2008 – Co-PI: A TCRP grant proposal to establish a Digital Collaboration and Communication common course (We reached 3rd phase before the proposal was declined)
- 2005- Co-PI: An NSF grant proposal for a Cyber Trust track in CIS (proposal was declined)
- 2005: “*BrickServer-3 Test and Benchmark Final Report: Benchmarking the Performance and scalability of various Linux Flavors under LAMP-Compliant platforms*”. A White Paper, CIS Department, West Texas A&M University (Client Funded Project).
- 2005: “*BrickServer-2 Test Benchmark Comparisons Report*”. A White Paper, CIS Department, West Texas A&M University (Client Funded Project).
- 2004: “*BrickServer-1 Test Assessment Report*”. A White Paper, CIS Department, West Texas A&M University (Client Funded Project).
- 2004 – Co-PI: "Visualization: A graphical Technique to analyze web server performance", Killgore Research Grant WTAMU, (\$2,750).

Honors and Awards:

- 2008: **Phil Gensler Professorship of Computer Information Systems**- West Texas A&M University, College of Business and Management.
- 2008: **Best Paper award**- *Conference on Information Systems Applied Research* (CONISAR).
- 2008: **Distinguished Paper award**- *Information Systems Educator Conference* (ISECON).
- 1996: **President's Club Performance Award**- *US West Communication (Qwest)*. At the time, the President's Club award was the highest award an Information Technology Professional could get at US West Communications.

Supervised Work:

- A GIS Framework for Health Care for the Government of Sharjah (Masters Report), University of Sharjah, 2003.

WTAMU Professional Service Activities:

- *Institutional Review Board (IRB) Documents Workflow Automation Project* (Jan 2009-Present): I am performing the duties of the Lead Architect, Designer and Developer of an Information System that will automate the various aspects of the IRB process.
- *TCRP Project (2008), Co-PI*: Introduce a Digital Communication and Collaboration course into the core curriculum: At the end of the 3rd phase, the project was not funded. An extensive amount of time and effort was dedicated to the project. The system is currently running off WTAMU web-infrastructure.
- *Environment Science Protective Concentration Site Analysis (PCL) Project* (June 2007-Dec 2008): In collaboration with CIS and Environmental Science faculty, we built a web-based software application that maintains toxicity data of various chemicals, derives the various PCL levels of various species and allows an analyst to play what-if scenarios in support of a cleanup plan of an abandoned hazardous waste site. The system is currently running off WTAMU web-infrastructure.
- *Funded By Sage Inc of Amarillo (2005)*: Designed, administered and performed scalability performance tests and produced final reports for different Web-servers running different Operating systems on identical hardware under the same Linux, Apache, Perl, Python and PHP (LAMP) Architecture. The effort was to compare Sage's Brick server with other web appliances.
- *Funded By Sage Inc. of Amarillo (2004)*: Designed, administered, performed tests and produced a final report that Benchmarked Comparison tests for three different Web-server platforms running three different Operating systems on identical hardware for bottlenecks, scalability and performance.