Rajaa S. Shindi

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US Citizen

Education

- Interdisciplinary Doctorate in Human Computer Interaction, Department of Computer Science and, New Mexico State University, 2014.
 - Dissertation Title: "An Interactive Brain Training System for Children With Low Math Achievement and Attention Disorder".
- M.S. degree in Computer Science, New Mexico State University, NM, 2006. Master's Project: Evaluate the performance of Processor Simulators benchmarks when context switches are incorporated.
- Completed Online Course Improvement Program Fall 2013-2014 and Summer 2019. OCIP is
 professional development for NMSU faculty focusing on improving the quality of online teaching
 and learning. It expands on services currently available through the Teaching Academy and
 Instructional Innovation and Quality.
- Networking Technology, Heald College School of Technology, Sacramento, California
- A+ Service Technician Certification Examination
- BS in Computer Science, University of Technology, Baghdad, Iraq.

Teaching Experience

Fall 2005 - Present: Faculty Member NMSU

- Faculty member at Department of Accounting and Information Systems in the College of Business, New Mexico State University. Teaching Management Information System (BCIS 110/BCIS 338), Business and managerial applications of Management Information Systems and Information Technology, in this course, computer-based training (CBT) software MyITLab is used in the course. In this course I measure student's comprehensive learning by assigning a final practical project to apply what they learned. In the course we discuss using data to make a better decision? We are going to help managers figure out how to translate data into competitive advantage. Another course I had the experience to teach at the college is Introduction to computerized Information system (BCIS 110). Spring 2020 I will be teaching BCIS 480/580 e-commerce security. This course will provide and up-to-date survey of developments in computer security. Central problems that confront security designers and security administrators include defining the threats to computer and network systems, evaluating the relative risks of these threats and developing cost-effective and user-friendly countermeasures.
- Adjunct Faculty member at Dept. of Computer & Information Technology at Dona Ana Community
 College (DACC). As a faculty member at DACC, I took an active role in addressing the needs of our
 diverse students in providing a supportive environment, and in improving curricular and
 instructional strategies. I developed teaching tools that stress stimulating students to think
 critically and promoting group work and providing service to the college and the community.
- Teaching the following courses: operating systems, and Database Structure and applications, SQL (Structured Query Language) Quality Matter Certified Course, developed the course curriculum, CS 171G Instruction to Computer Science for non-Computer Science major, CS 177/CS 187 Programming in C/C++, Java programming online and Face to Face, Mobile App development, Computational Thinking and modeling. In summer 2017

I developed curriculum and the activities of COLL150-STEM First Year Experience Course in collaboration with Arizona State University. Workshop Arduino Microcontroller Programming. Create way to teaching Object-Oriented languages C#, C++ and Java programming language, this system helps and support students leaning and practice (Face to Face and Online).

- SharePoint / OneDrive training workshops to support the university-wide effort to increase computational skills within the college community.
- Online Teaching: I am also keeping current with emerging technologies and Online Teaching
 platforms such as Canvas. Completed the One-Year-Plus Fellowship (1Yr +). OCIP assists faculty
 in improving the quality of their online courses, reducing the cost of materials in their courses,
 and helping them become more effective online teachers.
- Received full Quality Matter training, BCIS 338 (2019,2020) and OECS235 SQL (Structured Query Language) is a national QM recognized. The program is a faculty driven, peer review process that is collaborative, collegial, continuous, centered on student learning, and informed by current research when a course successfully meets the QM standards, the course receives national QM recognition.

Jan 2006- 2008, Graduate Students advisor

Worked as a graduate Advisor to all graduate student, helped students with their degree plan and many other related issues. Organized Workshops with graduate faculty. Visited 6 countries in the Middle East to recruit graduate students and open collaboration with universities in the Middle East (Jordan, Kuwait, UAE, Saudi Arabia, Bahrain and Oman).

2003 – Dec 2005, Teaching Assistant, Dept. of Computer Science, New Mexico State University (NMSU), Las Cruces, NM. Helping students with Word, Excel, Access, Web page, C, Visual Basic .NET and PowerPoint in the lab.

1990 – 1992: Instructor, University Technology, Baghdad Iraq. I thought classes in Pascal language, FORTRAN, Assembly language and Math Algebra.

Professional Services

- NM Collegiate Business Articulation Consortium, Information Systems/Computer Science Representative.
- Faculty Advisor for Association and Information Systems Professionals, National and NMSU
- Faculty Advisor for Muslim Student Associations at NMSU/DACC.
- Serving in many committee's accreditation, assessment, retention, and hold leadership positions in numerous campus projects such as:
- Public School work Force Committee, the charge of this committee is to develop Policy & Procedures Manual, Faculty/Student Handbook, and Operating MOU. Dual Credit accreditation. My main task in working with the director of advising at DACC is to develop curriculum pathways for Arrowed park early college high school, Engineering Pathway, Associate of science/ life science. This task requires collaboration across several colleges, meeting with college of engineering and arts and Sciences, my other role is Leading the initiative to develop a transfer program with Department of Computer Science.
- Enrollment Management Committee: The Charge of the committee is to develop a recruitment and retention plan to help meet the key performance indicators for enrollment, retention and completion.
- Freshmen orientation committee.
- The DACC assessment Committee, the agenda include discussion about committee goals for the
 academic year, Critical Thinking Performance, assessment questions probably need to include a
 way of direct assessment in addition to indirect assessment.
- DACC Achieving the Dream core Team.

Grants:

As a strong supporter of STEM, I continue to seek-out opportunities for external funding:

- STARTALK 2020 Technology as the Core of Standards Based Arabic Language. (In Progress)
- Project STEM Lead, Spring 2019-Summer 2019. TRIO Upward Bound programs at New Mexico State University have received supplementary awards for \$120,000 to enhance STEM initiatives into their curriculum. (Accepted)
- Project Lead of Achieving the Dream \$225,000 (ATD)-STEM Grant (2015-2018). (Accepted). The
 integrated planning and advising system for students (IPASS) grant was sponsored by EDUCAUSE
 and created with funding from the Leona M. and Harry B. Helmsley Charitable Trust.
- In-spark Science Network fall 2015(Accepted), Joined the In-spark Science Network an innovative
 online science course at Arizona State University that was built using the Smart Sparrow platform,
 the Science Network will create next-generation courseware and provide the tools and support
 to empower teachers to teach the courseware at scale.
- I serve as a P.I. Principle Investigator and Chair for this project seeking \$1. million. The S-STEM National Science Foundation Grant, (Did not apply). The National Science Foundation (NSF) Scholarships in Science, Technology, Engineering, and Mathematics program (S-STEM) addresses the need for a high-quality STEM workforce in areas of national priorities. recruitment of students to higher education programs and careers in the S-STEM disciplines; community building and support among S-STEM scholars within the institution; participation in local or regional professional, industrial or scientific meetings and conferences; and career counseling and job placement services for S-STEM scholars.
- I was invited to participate in the Discover STEM+C NSF Grant (Pending, 3/2018), The proposed team includes STEM and computing scientists, researchers and teachers; educational technologists; a senior geography and GIS professor; a geography educator, a school psychologist and public-school leaders along with collaboration between NMSU, University of Colorado-Boulder, and Michigan State University. The aim of this grant is to increase access to and ownership of STEM+C knowledge by K-12 teachers.
- I served on Title V proposal seeking \$2.5million, DACC (Rejected, 2015, 2017).

Awards and Recognition:

- Certificate of Appreciation and Excellence, NMSU TRIO Upward Bound GISD/LCPS Program 2019
 Crimson Summer Institute Aggie Academy. 7/9/2019
- Oct 2015, AGGIE Shark Tank, Yates Theater, Domenici Hall. Arrowhead Center and New Mexico State University's. \$30,000 for a 25 percent stake. I also won the sharks' favorite and audience favorite, racking up an additional \$3,500 in prize money. Mr. Andy Rice, BS, MS Industrial Engineering, outstanding Industrial Engineering student in the U.S. was one of the attendees. Received a very valuable feedback.
- ABQ Journal story about Shark Tank: "Shindi an NMSU Ph.D. in computer science and the only woman in the Shark Tank – launched into her pitch, explaining how medication isn't solving all the problems presented by attention deficit disorders" The link to the article is: bit.ly/20oKsF4
- 2015-2016 LAUNCH AWARD WINNER. The Arrowhead Center LAUNCH, NMSU. Game-changing technologies are emerging at NMSU, where researchers and creative problem solvers are working in disciplines with real world impacts.
- 2014, One-Year-Plus Fellowship (1Yr +) \$2000. 16-month program that provides an in-depth experience for a small cohort of NMSU faculty. This program assists faculty in improving the quality of their online courses.

- 2013-2014, Certificate of recognition, New Mexico supercomputing challenge, Los Alamos National Laboratory.
- 2012, Certificate of Recognition for completion of the ChAMPION program for faculty development in assessment of students learning and documentation of scholarly teaching, Office of the Associate Provost, NMSU.
- 2011-2012, Distinguish Teaching Academy member, participated in at least fourth hours of professional Development, Teaching Academy, NMSU.
- 2012 Letter of recognition, Project Lead, DACC Intranet.
- Except Employee Performance Highest Evaluation Score, 2014-2015 and 2017.

Community Outreach Activities (K-12):

- Project Lead the way (PLTW), in collaboration with Cindy Nixon, the Director of School Engagement I have proposed the idea to lead teaching Computer Science and Information Technology materials as a Dual Credit after receiving the proper training. That way we could engage the high school students and promote the Information Technology and software development.
- Vice President of the NM Networking for Women in Science and Engineering. This is an important professional group in our state, and I believe it's critical to continue supporting and growing this membership. By stepping up in this role, I can bring new opportunities and continue growing great things in our area and bring other women in the STEM fields on board. One of my projects is to apply the Framework GE Foundation Workplace Skills Program. This is a great reach out activity that intended to help high school and college-age students close their job skills gap such as Understanding Self, Teamwork, and Critical Thinking. The purpose of the program is to provide participants with a comprehensive introduction to the "soft skills," or what we believe are the critical essential skills, needed to help them make a successful transition from their schooling to the modern-day workplace.
- Intel Science Fair for several years served as a mentor and a Judge at the Intel science fair College
 of Engineering, regional, State and International for middle and high school students helping them
 with their projects and building the bridge for the students to the STEM degree and possibly a job
 in the field.

Corporate World Work Experience

April 2006– FALL 2018: Database and System Administrator DACC and NMSU

- Systems Administrator and an expert in SharePoint migration and management technologies assisting in the planning and supporting of the information technology environment related to our server-based application: Database SQL Servers, SharePoint 2007, 2010, 2013, Office 365.
- Experience in total protection with Office 365 and cloud Computing, Power BI.
- SharePoint Project, administrating the farm, design and maintenance the farm.
- Works on medium and large complex projects that are enterprise wide and require the highest level of expertise and multiple technical disciplines.
- Expert Knowledge of SharePoint Development environment, creating Workflow using SharePoint Designer, MS InfoPath Forms 2007, 2010
- Supports and enhances existing Database\software applications
- Continuing the day to day monitoring of systems, maintaining the business continuity as it relates to systems.
- Use languages and programs: SQL scripts, PL/ SQL, COGNOS reporting, Oracle Database.
- Developed multiple applications using of C, C++, C sharp, VB language, Visual Studio .NET Platform.
- Expert Knowledge of Microcontrollers Engineering programming.
- Expert knowledge of structured query language (Oracle SQL) and PL /SQL. Develop procedures, functions and packages using Pl/SQL, sample applications: Using Pl /SQL to develop a procedures

- to generate an email from the database, develop a procedure to implement the ETL process to freeze tables in ODS and report from frozen tables, etc.
- Experience in Data Warehousing, ETL (Extract, Transfer, Load) Tools.
- Design a paperless database system to the Graduate school of New Mexico State University. This system will integrate all the functions/processes that the graduate school engages in. Connect the system with Banner oracle database.

July 2005 – April 2006: Electronic Data Systems (EDS), El Paso, TX.

• Programmer SQL, C, Oracle Database.

1993 - 2002: Owner and Manager of R&R Computers, Woodland, CA.

- Created the business in an apartment and allow it to grow into a retail store.
- Oversaw all Transactions involved in opening a business. Purchased and maintained all products
 which consisted of computer parts. Hired and trained three technicians and one administrative
 staff person. Oversaw all business operations which include, ordering computer parts, repairing,
 upgrading, and building new computers and servers. Buying and selling computer parts.

1999 - 2000: Application Support Specialist: County of Yolo, Health Dept., Woodland, CA. Assisting in maintaining over 250 computers at the Public Health Dept. Upgrading computers and software. Respond to correspondence from office staff by assisting them with computer problems.

Other Qualifications

- Design and implementation of engaging and effective instruction.
- Learning outcomes assessment, Curriculum development.
- Collaboration with Department faculty.
- Effective teamwork, interpersonal, organizational, and time-management skills.
- Work with diverse student populations.
- Student academic advisement.
- Distinguished Teaching Academy Member.
- National Certified Quality Matter for my Online Classes, 2014, 2019.
- Expert Knowledge of MS SQL database, Oracle Database and MS ACCESS all versions
- Knowledgeable of Object-Oriented Programming in Visual Basic .NET
- Experience within the business intelligence and data warehouse environment.
- In-depth knowledge and at least five years hands-on experience with the Microsoft SharePoint Server 2007/2010/Cloud Office 365.
- Expert knowledge of structured guery language (Oracle SQL) and PL/SQL
- Excellent written and verbal communication skills
- Strong analytic, problem solving, and collaborative skills
- Knowledge of standard project development lifecycle concepts
- Knowledge and understanding of relational and dimensional data models
- Experience with ETL (Extract, Transfer, Load) Tools.
- Computer performance analysis: Find the bottleneck in a real-life network. That includes running some UNIX / Linux command to test network performance.
- Manager and owner of a computer store. In charge of purchasing, planning, and training of technician.
- Bilingual: English & Arabic.

Professional Conferences, Workshops, Presentations, and Publications

- Dr. Rajaa Shindi, Active Learning for teaching advanced Data Analytics and Logical function In Excel: Remembering, Understanding and Applying, Spring 2020. (Article, In progress).
- Dr. Samuel Kadavakollu, BCOM and Dr. Rajaa Shindi, NMSU. Motivating High School Students
 Towards Careers in Osteopathic Medicine by Offering American
 College Test and Biomedical Sciences Enrichment Program in Medically Underserved Areas,
 Collaborative work BCOM and NMSU, September 2020. (Article, Published).
- Microsoft, Dashboard in a Day using Power BI in Austin, TX Summer 2019. (Training and Microsoft Collaboration)
- Dr. Rajaa Shindi, STARTALK 2019 Technology as the Core of Standards Based Arabic Language Instructions Level II, 64-Hours Professional development program. Long Beach, CA 25-29 July – 2019. (Workshop Training to apply for a Grant)
- Dr. Rajaa Shindi. NMSU SUMMER ACADEMY, engaging high school students in a meaningful
 way to build interest in our programs as well as others at DACC/NMSU NMHEAR Conference,
 NM Spring 2019 (Poster).
- iPASS in Action at Doña Ana Community College: Promoting STEM Awareness and Careers, Transforming Higher Ed column of EDUCAUSE, January 2018. (Article).
- Summer College Prep Workshop Developed and Presented, Academic Resource Center, DACC in 7/31-8/11 2017 (Workshop).
- ERPSim SAP Training, College of Business, NMSU, in June 26-28, 2017 (Training).
- Achieving the Dream conference is network of higher Ed institutions, coaches and advisors San-Francisco California, in Feb 21-24, 2017. (Conference and Training)
- Weka, Comprehensive set of tools for machine learning and data mining to enhance your insights through predictive analytics, Feb 2017 (Training)
- Learning & Technology Conference, attended and paper reviewer, Effat University, Saudi Arabia, in 26-28 Fed 2016 (Conference)
- Symposium, Intellectual Property 2016, KAUST University (Conference)
- The Albuquerque Tech-Security Conference, 2015. (Conference)
- EDUCAUSE, International Conference 10, 2015. Indianapolis, Indiana the best thinking in higher education IT. (Conference and Workshop)
- Bridging the Gap: STEM Skills and the Workforce of Tomorrow, GE Foundation and National Science Teacher Association, Orlando, Florida, July 2015. (Presentation)
- Dr. Rajaa Shindi, "S.T.E.M. Time to Own It!" Annual Professional Development Day, Sept 25, 2015. What does it mean to be College and Career Ready? During this session will discuss the STEM 2025: The Workforce of Tomorrow. (Presentation).
- Dr. Rajaa Shindi, "Pay Attention!" NEW MEXICO HIGHER EDUCATION ASSESSMENT AND RETENTION CONFERENCE (NMHEAR), Albuquerque NM. USA Feb 28-29, 2015.
- Dr. Rajaa Shindi, "Digital Poster Gallery: An Exhibition of DACC QM Certified Online Courses" Annual Professional Development Day, Sept 25, 2015. (Poster)
- Rajaa Shindi, "SharePoint and Reporting" Workshop we will demonstrate how the power of using SharePoint designer in creating a dashboard and customize a page, create a Key Performance indicator. Share a way to extract and load SharePoint data I SQL server integration services, graph web part and more best practices. New Mexico Technology in Education Conference, Albuquerque, NM. Nov 2013. (Workshop)
- Attended a Security workshop from Canaudit, Inc. (4 CPE Credits). The workshop on Data Breaches: Paths and Prevention. The workshop utilized industry reports and live demonstrations to explore: how data breaches occur, how attacker tools and techniques are evolving and how individuals and organizations can protect themselves. ACANS Summit on Friday, November 16, 2012 NMSU Golf Course. (Training)

- Rajaa Shindi, "Using Microsoft Office SharePoint Services 2007 Workflows with InfoPath and SharePoint Designer to improve and automate some of the Dona Ana Community College business processes" New Mexico Technology in Education, Albuquerque, NM 11, 2010 (Presentation).
- Rajaa Shindi, "SharePoint: Working with Lists, Send list members SMS and more", New Mexico Technology in Education, Albuquerque, NM 11, 2011 (Presentation).
- Pre-conference Workshops: SharePoint User Group, Workshop New Mexico Technology in Education, Albuquerque, NM 11, 2012 (Training).
- Young Women in Technology Conference (YWIN) 2012 (Conference).
- Rajaa Shindi, "What could faculty do with the new DACC SharePoint Portal", Faculty Professional Development Day, April 17, 2010 (Presentation).
- Rajaa Shindi, Dr. Shakir Manshad, "Traditional and Online Peer Assessment." NMHEAR conference, Albuquerque NM. USA Feb 28-29, 2008. (Presentation).
- NCWIT, National Center Women In Technology, NC 2015, Active member of Young Women in Technology Organization at NMSU to motivate and help support young female in the Computer Science.
- NMSU Disability Awareness Conference, Bridging the Gap in Higher Education, 2013
- NMSU System Summit, April 2012 Transferring to NMSU, Conversation for student success.
- Attended the SharePoint Training and learn how to administrate the SharePoint platform 2009,2010
- Attended the Database SQL 2008 training and learn how to secure and admin the SQL database 2008 server 2009.
- Continuing attending Teaching Academy workshops at NMSU.
- NEW MEXICO HIGHER EDUCATION ASSESSMENT AND RETENTION CONFERENCE (NMHEAR) attended 2008, 2009, 2010 ... 2015.
- SunGard SCT Higher education 2007 and Pre-conference training workflow application

Patent Application:

BrainSTEM Provisional patent May 2016
BrainSTEM Full Utility Patent May-2017 ("In Progress").

Professional Society Affiliations

- Association of Information Systems Professionals (AITP), 2019
- Member of the National Science Teacher Association, 2015-Present
- Association for Computing Machinery (ACM)
- DACC, Computer Information Technology advisory board member 2013, 2019.
- Computer Science Teachers Association (CSTA).
- Active member of the Teaching Academy 2015- Present, NMSU

Research Interest:

- Human computer interaction (HCI) is my research focus. HCI is an interdisciplinary field in which
 computer scientists, engineers, psychologists, social scientists, medicine and health and design
 professionals play important roles. The goal of HCI is to solve real problems in the design and use
 of technology, making computer-based systems easier to use and more effective for people and
 organizations. For my Ph.D. dissertation, I have researched and developed a novel a Brain Training
 System for enhancing attention and working memory among Children with Low Math
 Achievement and Attention Disorder. I have been working with my advisor to publish results in
 two different journals (Pending).
- How learning works is one of my main research interests. According to the authors of the Seven Research-Based Principles for Smart Teaching. "Any conversation about teaching must begin with a consideration of how students learn. However, instructions may find a gap between resources on learning and those that provide practical classroom strategies. Learning is a process that leads

• to change". "Teaching Metacognition Improves Learning". Metacognition often is very important; however often overlooked component of learning. I love teaching! I love interacting with students and believe in giving students appropriate opportunities to practice monitoring their learning and adapting as necessary.