Dr. Mohammed Abdul Salam Gollapalli

Assistant Professor

Personal Data

Nationality |Australian

Date of Birth |1983

Department |College of Computer Science & Information Technology (CCSIT)

Official UoD Email | magollapalli@iau.edu.sa

Office Phone No. |35481

Language Proficiency

Language	Read	Write	Speak
Arabic	Above Average	Average	Minimum
English	Excellent	Excellent	Excellent
Urdu	Excellent	Excellent	Excellent

Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2013	PhD	University of Queensland	Brisbane, Australia
2005	MIT	Griffith University	Gold Coast, Australia
2004	BIT	University of Canberra	Canberra, Australia

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	Data Linkage for Querying Heterogeneous Databases
Master	
Fellowship	

Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work			Date
Assistant Professor	University of Dammam	Dammam	Saudi Arabia	Oct 2014 – Present
Research Assistant/Technical Consultant	Australian After Hours Doctors	Brisbane	Australia	Oct 2013 – Sept 2014
ITEE Researcher/Course Demonstrator	University of Queensland, Contracts	Brisbane	Australia	Jul 2010 – Jul 2014

| Technical Consultant | TECHNOLOGYONE Corporation, Contracts | Brisbane | Australia | Jul 2009 – Mar 2012 |

Scientific Research Papers Presented to Refereed Specialized Scientific Conferences

#	Name of Investigator(s)	Research Title	Conference and Publication Date
1	M. Gollapalli	Ensemble Machine Learning Model to Predict the Waterborne Syndrome	Algorithms 2022, 15, 93. https://doi.org/10.3390/a15030093
2	M. Gollapalli, Maissa A. AlMetrik, et al.	Task Failure Prediction Using Machine Learning Techniques in the Google Cluster Trace Cloud Computing Environment	Mathematical Modelling of Engineering Problems Vol. 9, No. 2, pp. 545-553, 2022.
3	M Gollapalli, A. Rahman, D. Musleh, N. Ibrahim et al.	A Neuro-Fuzzy Approach to Road Traffic Congestion Prediction	Computers, Materials and Continua, vol. 72, no. 3, pp. 1-16, 2022.
4	A. Rahman, S. Abbas, M. Gollapalli, R. Ahmed, S. Aftab et al.	Rainfall Prediction System Using Machine Learning Fusion for Smart Cities	Sensors, vol. 22, no. 9, pp. 1-15, 2022. doi.org/10.3390/s22093504
5	A. Rahman, M. Mahmud, T. Iqbal, L. Saraireh, H. Kholidy, M. Gollapalli et al.	Network Anomaly Detection in 5G Networks	Mathematical Modelling of Engineering Problems, vol. 9, No. 2, pp. 397-404, 2022.
6	M. Jamal, N.A. Zafar, A. Rahman, D. Musleh, M. Gollapalli, S. Chabani	Modeling and Verification of Aircraft Takeoff Through Novel Quantum Nets	Computers, Materials and Continua, vol. 72, no. 2, pp. 3331-3348, 2022.
7	A. Rahman, K. Sultan, I. Naseer, R. Majeed, D. Musleh, M. Gollapalli et.al.	Supervised Machine Learning-based Prediction of COVID-19	Computers, Materials & Continua, vol. 69, no.1, pp. 21-34, 2021. DOI: 10.32604/cmc.2021.013453
8	N.B. Almandil, M. Taha, R.K. Farooq, A. Alhibshi, M. Ibrahim, E.H. Anouar, M. Gollapalli, F. Rahim, M. Nawaz, S.A.A. Shah, and Q.U. Ahmed	Synthesis of thymidine phosphorylase inhibitor based on quinoxaline derivatives and their molecular docking study	Molecules, 24(6), p.1002, 2019
9	M. Taha, F. Rahim, M. Ali, M.N. Khan, M.A. Alqahtani, Y.A. Bamarouf, M. Gollapalli, R.K. Farooq, S.A.A. Shah, Q.U. Ahmed and Z.A. Zakaria	Synthesis of chromen-4-one-oxadiazole substituted analogs as potent β-glucuronidase inhibitors	Molecules, 24(8), p.1528, 2019
10	M. Gollapalli, M. Taha, M.T. Javid, N.B. Almandil, F. Rahim, A. Wadood, A. Mosaddik, M. Ibrahim, M.A. Alqahtani, and Y.A. Bamarouf	Synthesis of benzothiazole derivatives as a potent α-glucosidase inhibitor	Bioorganic chemistry, 85, pp.33-48, 2019.

11	N.B. Almandil, M. Taha, M. Gollapalli, F. Rahim, M. Ibrahim, A. Mosaddik and E.H. Anouar	Indole bearing thiadiazole analogs: synthesis, β-glucuronidase inhibition and molecular docking study	BMC chemistry, 13(1), pp.1-10, 2019
12	M. Taha, I. Uddin, M. Gollapalli, N.B. Almandil, F. Rahim, R.K. Farooq, M. Nawaz, M. Ibrahim, M.A. Alqahtani, Y.A. Bamarouf, and M. Selvaraj	Synthesis, anti-leishmanial and molecular docking study of bis-indole derivatives	BMC chemistry, 13(1), pp.1-12, 2019
13	M. Gollapalli, A. Alansari, H. Alkhorasani, M. Alsubaii,	A novel stacking ensemble for detecting three types of diabetes mellitus	Computers in Biology and Medicine, 147 (2022) 105757
14	R. Sakloua, R. Alzahrani, M. Al-Hariri, M. Alfares, D. AlKhafaji,	using a Saudi Arabian dataset: Pre-diabetes, T1DM, and T2DM	IEEE Access, Vol 10, 2022
15	A. Rahman, D. Musleh, M. Nabil, H. Alubaidan, M. Gollapalli, G. Krishnasamy,	Assessment of Information Extraction Techniques, Models and Systems	Mathematical Modelling of Engineering Problems, vol. 9, No. 3, pp. 683-696, 2022
16	D. Almoqbil, M. Alam Khan, M. Farooqui, M. Ahmed,	IoMT-Based Mitochondrial and Multifactorial Genetic	Computational Intelligence and Neuroscience, vol 2022, Article ID 2650742
17	M. Salih Ahmed, M. Mahmud	Inheritance Disorder Prediction Using Machine Learning	Computational Intelligence and Neuroscience, Vol 2022, Article ID 1051388
18	A. Rahman, M.Nasir, M. Gollapalli,	Supervised Machine Learning Empowered Multifactorial Genetic Inheritance Disorder Prediction	Bioorganic chemistry, 80, pp.112-120, 2018

Membership of Scientific and Professional Societies and Organizations
- 2004 – Present: Microsoft Professional Member
- 2013 – Present: GitHub OpenSource Community Member

Teaching Activities

Undergraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Data Mining & Warehousing	CIS 517	Lectures, Labs
2	Knowledge Management & Information Retrieval	CIS 525	Lectures, Labs
3	System Analysis & Design (1)	CIS 412	Lectures, Labs
4	System Analysis & Design (2)	CIS 421	Lectures, Labs

5	Database Concepts & Design	CIS 321	Lectures
6	Database Management Systems	CIS 411	Lectures
7	Project Proposal	CIS 511	Final Year Graduation Project
8	Project Implementation	CIS 521	Final Year Graduation Project
9	COOP	CIS 444	Evaluations

Brief Description of Undergraduate Courses Taught: (Course Title – Code: Description)

CIS 525	This course begins with a brief introduction to Knowledge Management (KM) and its significance in the 21st century. The Knowledge Management concepts covered in this course include: Knowledge Management Cycle, Knowledge Management Models, Knowledge Capture and Codification, and Knowledge Application and Knowledge Management Tools. The second part of this course covers latest development of Information Retrieval (IR), Information Retrieval Modeling, Retrieval Evaluation, Query Languages, Query Operations, Text Operations and Indexing and Searching. As part of this course, students will be trained on some latest software.
CIS 517	This course emphasizes on the principal concepts of Data Mining and Data Warehousing techniques. Data Mining concepts include: Data Mining cycles, Data Mining methodology, major issues in Data Mining, data preprocessing stages (data cleaning, data integration, data reduction, data transformation and data discretization), data visualization, and measurement of the effectiveness of data mining. The course goes further into data warehousing and analytical processing techniques including: data warehouse modeling (data cubes and OLAP), mining frequent patterns, associations, correlations, classifications (such as decision trees, neural networks, Bayes classification, rule-based classification) and cluster analysis methods (such as partitioning, hierarchical, density-based, and grid-based approaches). As part of this course, students will be trained on latest data mining software.
CIS 521	Project implementation course offers students an opportunity to assemble their knowledge acquired throughout their BS curriculum to realize a final project. This would require them to gather information about the proposed subject and realize a final report as well as to develop a system practically. At this stage, students must carry on all phases of system development for the subject already defined in the precedent course (Project proposal), and under the supervision of the same supervisor (as possible). At the end of the semester, students are asked to make an oral presentation with the presence of faculty members as referees.
CIS 511	In this course, students choose a project subject and define the objectives of the project under the supervision of a faculty member, and prepare the project proposal including: defining the statement of the problem, defining system requirements, defining different candidate solutions for the problem of study, making feasibility study for different candidate solutions, defining the best candidate solution, defining time table schedule. Students should present the project interim report at the end of the semester, grading will be obtained by oral examination to be held by a committee from faculty members.
CIS 444	The Cooperative education program is a collaborative and structured practical training academic program at CCSIT between Dammam University and employers to improve student's skills for employment upon graduation. The students who have completed at least 90 credit units are eligible to register this course. The course duration is 12 weeks with 10 weeks onsite training/practical work and 2 weeks for preparing the technical report and oral presentation. This training provides students complementary knowledge and training to deal with real-world problems in a professional environment. The students must join in organization and work under the supervision of 2 supervisors (one form the organization and one from the college) to accomplish the training.
CIS 421	This course includes: designing simple requirements model, measurability of non-functional requirements, the process of selecting best alternative design strategies, best practices of designing human interfaces, conventional design approaches (Data Flow Diagrams/extended ER

	Diagrams/Architecture/Subsystems/Flowcharts/Pseudo codes), object oriented analysis and design, designing structure diagrams (Class/Component/Object) and behavior diagrams (Activity/Sequence/State Machine). The course also includes concepts of design patterns, deliverables and outcomes of the process of coding and testing, applying installation strategies, issues of providing support for end users, and factors that influence the cost of maintaining an information system. Students will be trained on some latest software tools.
CIS 412	This course emphasizes on the analysis of the structured system and designing techniques for software project development. It includes: setting IS project goals, developing work plans and methods to achieve those goals, and measuring progress against a project plan. The course material includes describing the major alternative methodologies used in developing information systems and the considerations involved in choosing which methodology to use. Production of the requisite systems documentation at each point in the analysis and designing an information system, and doing so with clarity and completeness. Analyzing business need for information and developing an appropriate strategy to solve the problem and providing the required information service. Preparing and using various information-gathering techniques for eliciting user information requirements and system expectations. Construction and interpretation a variety of system description documents. Students will be trained on some latest software tools.
CIS 411	This course emphasizes on the principal concepts of Database Management Systems (DBMS). The DBMS concepts include: Storing data: disks and files which include the memory hierarchy, RAID, disk space management, buffer management, file and indexes, page formats and record formats; file organization and indexes which introduce cost modeling, comparison of three file organizations, overview of indexes and properties of indexes. Three-structured indexing, hash based indexing and database design security; transaction management which introduce to transactions and schedules, concurrent execution of transaction, lock-based concurrency control and crash recovery. Crash recovery includes introduction to ARIES, recovery from a system crash and media recovery. The course also covers advanced topics such as: Parallel and distributed database including architectures for parallel databases, parallel query evaluation and optimization, distributed DBMS architectures, storing data in distributed DBMS, distributed catalog management and query processing, updating distributed data, distributed transactions and concurrency and recovery. As part of this course, students will be trained on some latest database management software.
CIS 321	This course aims to discuss the basic concepts and design of database. It covers topics such as: data model, levels of abstraction, data independence, and concurrency control. It focuses on how to design databases for given problems, and how to use database effectively, these including ER model, key and participation constraints, weak entities, class hierarchies, aggregation and conceptual DB design using the ER model. Relational model: creating and modifying relation using query language, enforcing integrity constrains, ER to relational and view. Schema refinement and normal forms: functional dependencies, reasoning about functional dependencies, normal forms, decompositions and normalization. Relational Queries: relation algebra and calculus and commercial query languages. Object database systems: user defined abstract data type, structured types, objects; object identity; and reference type, inheritance, and database design for an ORDBMS. Students will be trained on some software tools such as: Oracle, Sybase, DB2, and Informix.

Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
1	Master's Thesis – Term 2, 2018-19 to Term 1, 2020-21 (Master's)	CS 672	

2	Cloud Computing – Term 1, 2020-21 (Master's)	CS 625	

Course Coordination

#	Course Title and Code	Coordination	Co-coordination	Undergrad.	Postgrad.	From	to
1	ARTI 506 – Data Science and Analytics – Term 2, 2021-22 (Bachelor's)	Yes				2021	2022
2	CIS 517 – Data Mining and Warehousing – Term 2, 2021-22 (Bachelor's)	Yes				2021	2022
3	CIS 521 – Graduation Project Implementation – Term 2, 2021-22 (Bachelor's)		Yes			2021	2022
4	CIS 413 – Professional Responsibility – Term 1, 2021-22 (Bachelor's)	Yes				2021	2022
5	CIS 511 – Graduation Project Proposal – 6Term 1, 2021-22 (Bachelor's)		Yes			2021	2022
6	CIS 444 – Practical Training (COOP) – Summer, 2020-21 (Bachelor's)		Yes			2020	2021
7	CIS 421 – System Analysis and Design (2) – Term 2, 2020-21 (Bachelor's)	Yes				2020	2021
8	CIS 514 – Object Oriented Analysis & Design – Term 2, 2020-21 (Bachelor's)		Yes			2020	2021
9	CIS 517 – Data Mining and Warehousing – Term 2, 2020-21 (Bachelor's)	Yes				2020	2021
10	CIS 521 – Graduation Project Implementation – Term 2, 2020-21 (Bachelor's)		Yes			2020	2021

#	Course						
11	CIS 511 – Graduation Project Proposal – Term 1, 2020-21 (Bachelor's)		Yes			2020	2021
12	CS 412 – Algorithm Analysis and Design – Term 1, 2020-21 (Bachelor's)	Yes				2020	2021
13	CS 512 – Artificial Intelligence – Term 1, 2020-21 (Bachelor's)	Yes				2020	2021

Supervision of Master and/or PhD Thesis

#	Degree Type	Title	Institution	Date
	Masters	Prevalence, Cause and Management Strategy of Sickle Cell Disease (CSD) in the Eastern Regions of Saudi Arabia using Data Mining Techniques.	IAU	June 2021

Ongoing Research Supervision

#	Degree Type	Title	Institution	Date
1	Undergraduate	Prediction and Modeling for Patients with Appendicitis disease in Saudi Arabia	Imam Abdulrahman bin Faisal University	2022-2023

Administrative Responsibilities, Committee and Community Service
(Beginning with the most recent)

Committee Membership

#	From - To	Position	Organization
1	2021 – 2022	Chair	Professional Certifications Alignment Committee (2021-22), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
2	2021 – 2022	Member	Vice Dean for Postgraduate Studies and Scientific Research (2021-22), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
3	2020 – 2021	Member	Strategic Planning and Risk Management Unit (2020-21), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
4	2020 – 2022	Chair	Professional Certifications Alignment Committee (2020-22), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia

5	2020 – 2021	Member	CIS Program Quality Unit (2020-21), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
6	2019 – 2020	Member	Scholarship and Promotions Unit (2019-20), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
7	2019 – 2020	Chair	Professional Certifications Alignment Committee (2019-20), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
8	2018 – 2019	Member	Professional Certifications Alignment Committee (2018-19), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
9	2018 – 2019	Member	Graduation Project Unit (2018-19), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
10	2017 – 2018	Chair	Website and Laboratory Development Committee (2017-18), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
11	2017 – 2018	Chair	Promotion Requirements Checking Committee (2017-18), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
12	2017 – 2018	Member	Public Relation and Documentation Committee (2017-18), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
13	2016 – 2017	Member	Vice Dean of Development and Quality (2016-17), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
14	2016 – 2017	Member	Quality Assurance and Academic Accreditation Committee (2016-17), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
15	2015 – 2016	Member	Accreditation Board for Engineering and Technology (2015-16), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia
16	2014 – 2015	Member	Computer Information System Department (2014-15), CCSIT, Imam Abdulrahman bin Faisal University, Dammam, Saudi Arabia

Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)

1	Data Science & Analytics
2	Knowledge Extraction
3	Big Data
4	System Analysis & Design
5	IT Project Management

Last Update

22/10/2022