## Personal Information

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|---|---|
| Name | Rizik M. H. Al-Sayyed |
| Place and date of birth | Jordan 21-9-1963 |
| Faculty | King Abdullah II School for Information Technology |
| Department | Information Technology |
| National ID Number | 9631022961 |
| Date of appointment | September 06, 2009 |

## Qualifications

| Qualification | Specialization | University of donor rank | Date |
|---|---|---|---|
| PhD | Computer Science | Leeds Beckett University, UK | 2007 |
| High Diploma | Research Methodology | Leeds Beckett University, UK | 2007 |
| Master | Computer Science | Western Michigan University, USA | 1995 |
| Bachelor | Computer Science | The University of Jordan, Jordan | 1984 |

## Specialization and domain of interest

| | |
|---|---|
| General Specialty | Computer Science |
| Specialization | Simulation, Computer Networks, Cloud Computing, Algorithms Optimization, and Databases |
| Domain of interest | • Computer networking performance<br>• Cloud computing<br>• Computer Simulation<br>• Optimization of algorithms<br>• Databases (relational and big)<br>• Data Visualization<br>• Swarm Intelligence and Machine Learning Algorithms |

## Title and abstract of the doctoral thesis (within 150 words)

### Title: The Performance Requirements for Reliability in Wireless Networks

In a wireless environment, the voice over Internet Protocol (VoIP) capacity of the proposed model called Redundancy in Wireless Connection (RiWC) model was checked with and without background traffic. To determine the voice capacity of the model, three Quality of Service (QoS) metrics were checked: jitter, delay, data loss, in addition to the response time and throughput.

The thesis contribution to knowledge includes the RiWC model which has been developed to enable continuous on-demand adaptive mobile connection. It involves interoperability between devices on both the wired and the non-wired network. This model has the advantage of being simple, usable, adaptive, personalized and flexible.

Another major contribution of this thesis is the ability of the RiWC model to accommodate more VoIP sessions. This model proved to be flexible and able to accommodate mixed traffic, including data-centric and the voice that is highly affected by the QoS measurements.

**Google Scholar Link:**
https://scholar.google.com/citations?user=mczkflwAAAAJ&hl=en

| Item | All | Since 2018 |
|---|---|---|
| Citations | 614 | 520 |
| h-index | 13 | 10 |
| i10-index | 17 | 10 |

**Scopus.com Link**
https://www.scopus.com/authid/detail.uri?authorId=9639117500
https://orcid.org/0000-0001-7699-9074
*Number of Documents: 46*
Citations by *322* documents: 308
*h*-index: 9

**My University of Jordan Website:**
http://eacademic.ju.edu.jo/r.alsayyed/default.aspx

**My ResearchGate Website:**
https://www.researchgate.net/profile/Rizik-Al-Sayyed

**Career Experience**

| Job Title | Place of Work | Date |
|---|---|---|
| • Department Head (4 years),<br>• Assistant Dean for Students Affairs,<br>• University Website Manager,<br>• Faculty staff | The University of Jordan, King Abdullah II School for Information Technology, Amman – Jordan | Since September 6, 2009 until now |
| • Course Coordinator,<br>• Curriculum Coordinator,<br>• Testing Coordinator,<br>• IT Subject Coordinator,<br>• Men's Campus Information Technology Coordinator,<br>• Director of International Examinations and Licenses,<br>• Full Lecturer | United Arab Emirates University - General University Requirements Unit, Al Ain - United Arab Emirates | From August 1996 to August 2009, in two periods |
| Database Administrator, Systems Analyst | Ministry of Education, Doha - Qatar | Since September 1989 until August 1996 |
| Part time lecturer | Qatar University, Doha - Qatar | Since September 1991 until January 1993 |
| Computer Instructor | Ministry of Education, Amman – Jordan | Since November 1988 until August 1989 |

**Administrative works and committees**

| Administrative work and committee | Date |
|---|---|
| Director of the Center for Open Educational Resources and Blended Learning - The University of Jordan | • Since September 2020 until February 2022 **(2 years)** |
| Head of the Information Technology Department - The Information Technology Department - King Abdullah II College of Information Technology - The University of Jordan | • Since June 2017 until September 2020 **(3 years)**<br>• Since September 2011 until September 2012 **(1 year)** |
| University of Jordan Website Manager | • Since September 2016 until June 2017 **(1 Year)** |
| Assistant Dean for Students Affairs | • Since September 2010 until September 2011 **(1 year)** |

**Recent Publications within last five years**

| Name of researcher(s) | Research title, Publisher, Date |
|---|---|
| **Al-Sayyed, R.**, Abu Awwad, F., Itriq, M., Suleiman, D., AlSaqqa, S., & AlSayyed, A. | "The pass/fail grading system at Jordanian universities for online learning courses from students' perspectives", (2023, May). *In Frontiers in Education (Vol. 8, p. 1186535). Frontiers Media SA.* |
| Hababeh, I., Khalil, I., **Al-Sayyed, R.**, Moshref, M., Nofal, S., & Rodan | "Competent Time Synchronization Mac Protocols to Attain High Performance of Wireless Sensor Networks for Secure Communication", A. (2023). *Cybernetics and Information Technologies*, 23(1), 75-93. |
| Esra'A. Alhenawi, **Rizik Al-Sayyed**, Amjad Hudaib, and Seyedali Mirjalili | "Feature selection methods on gene expression microarray data for cancer classification: A systematic review." *Computers in biology and medicine,* 140 (2022): 105051. **Scopus Q1 Journal, IF: 6.69** |
| Salem, A., & **Al-Sayyed, R.** | "Security Framework for Hosting Systems on the Cloud: Case Study of Jordan E-Government Websites", (2022, November).  In *2022 International Conference on Emerging Trends in Computing and Engineering Applications (ETCEA)* (pp. 1-6). IEEE. |
| Harahsheh, Heba, Mohammad Alshraideh, Saleh Al-Sharaeh, and **Rizik Al-Sayyed** | "Improving Classification Performance for Malware Detection Using Genetic Programming Feature Selection Techniques." *Journal of Applied Security Research* (2022): 1-21. *Scopus Q2 Journal, IF: 1.24* |
| Moshref, Mahmoud, **Rizik Al-Sayyed**, and Saleh Al-Sharaeh. | "Improving the quality of service in wireless sensor networks using an enhanced routing genetic protocol for four objectives." *Indonesian Journal of Electrical Engineering and Computer Science* 26, no. 2 (2022): 1182-1196. *Scopus Q3* |
| S. Hussein, M. Otair, S. Alzoubi, A. Al-Sayyed, S. Numan, A. Numan, S. Jamal, and **R. Al-Sayyed** | "Diagnosis of COVID-19 from X-rays Using Recurrent Neural Network", *Information Sciences Letters*, 11, No. 6, 2279-2284. *Scopus Q2* |
| Suleiman, Dima, Aseel Odeh, and **Rizik Al-Sayyed** | "Arabic Sentiment Analysis Using Naïve Bayes and CNN-LSTM." *Informatica* 46, no. 6 (2022). *Scopus Q4* |
| Afaf Edinat, **Rizik Al-Sayyed**, & Amjad Hudaib | "A Survey on Improving QoS in Service Level Agreement for Cloud Computing Environment." *International Journal of Interactive Mobile Technologies* 15, no. 21 (2021). |
| Monther Khalafat, Ja'far S. Alqatawna, **Rizik Al-Sayyed**, Mohammad Eshtay, and Thaeer Kobbaey. | "Violence Detection over Online Social Networks: An Arabic Sentiment Analysis Approach." *International Journal of Interactive Mobile Technologies* 15, no. 14 (2021). *Scopus Q2 Journal, IF: 2.243* |
| Aya Taleb, **Rizik Al-Sayyed**, and Hamed Al-Bdour | "A New Ensemble Technique Based on Merging Other Known Techniques in The Social Network Analysis." *International Journal of Interactive Mobile Technologies* 15, no. 12 (2021). *Q2 Journal, IF: 2.243* |
| Mahmoud Moshref, **Rizik Al-Sayyed**, and Saleh Al-Sharaeh | "An Enhanced Multi-Objective Non-Dominated Sorting Genetic Routing Algorithm for Improving the QoS in Wireless Sensor Networks." *IEEE Access* 9 (2021): 149176-149195. *Scopus Q1 Journal, IF: 3.367* |
| Ahmad K. Al Hwaitat, , **Rizik MH Al-Sayyed**, Imad KM Salah, Saher Manaseer, Hamed | "Frequencies Wave Sound Particle Swarm Optimisation (FPSO)." *Journal of Experimental & Theoretical Artificial Intelligence* (2021): 1-32. |

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|---|---|
| S. Al-Bdour, and Sarah E. Shukri. | *Scopus Q1 Journal, IF: 2.111* |
| Sarah E.Shukri, **Rizik Al-Sayyed**, Amjad Hudaib, and Seyedali Mirjalili | "Enhanced multi-verse optimizer for task scheduling in cloud computing environments." *Expert Systems with Applications* 168 (2021): 114230. *Scopus Q1 Journal, IF: 8.665* |
| Dana A. Al Qudah., Bashar Al-Shboul, **Rizik Al-Sayyed**, and Alexandra I. Cristea. | "Investigating users' experience on social media ads: perceptions of young users." *Heliyon* 6, no. 7 (2020): e04378. *Scopus Q1 Journal, IF: 3.776* |
| Hassonah, Mohammad A., **Rizik Al-Sayyed**, Ali Rodan, Al-Zoubi Ala'M, Ibrahim Aljarah, and Hossam Faris. | "An efficient hybrid filter and evolutionary wrapper approach for sentiment analysis of various topics on Twitter." *Knowledge-Based Systems* 192 (2020): 105353. *Scopus Q1 Journal, IF: 8.139* |
| **Al-Sayyed, Rizik** MH, Hijawi Wadi'A, Anwar M. Bashiti, Ibrahim AlJarah, Nadim Obeid, and Omar YA Al-Adwan. | "An Investigation of Microsoft Azure and Amazon Web Services from Users' Perspectives." *International Journal of Emerging Technologies in Learning (iJET)* 14, no. 10 (2019): 217-241. *Scopus Q1 Journal, IF: 2.587* |
| Alazzam, Hadeel, Esraa Alhenawi, and **Rizik Al-Sayyed**. | "A hybrid job scheduling algorithm based on Tabu and Harmony search algorithms." *The Journal of Supercomputing* 75, no. 12 (2019): 7994-8011. *Scopus Q1 Journal, IF: 2.557* |
| MAHMOUD MOSHREF, **RIZIK AL-SAYYED**, SALEH AL-SHARAEH | "MULTI-OBJECTIVE OPTIMIZATION ALGORITHMS FOR WIRELESS SENSOR NETWORKS: A COMPREHENSIVE SURVEY." *Journal of Theoretical and Applied Information Technology (JATIT)* 31st July 2020. Vol.98. No 14. *Scopus Q3* |
| Moshref, Mahmoud, and **Rizik Al-Sayyad**. | "Developing ontology approach using software tool to improve data visualization (case study: computer network)." *Int. J. Mod. Educ. Comput. Sci.(IJMECS)* 11, no. 4 (2019): 32-39. |
| Ghatasheh, Nazeeh, Hossam Faris, Ibrahim Aljarah, and **Rizik MH Al-Sayyed**. | "Optimizing software effort estimation models using firefly algorithm." *arXiv preprint arXiv:1903.02079* (2019). |
| Al HWAITAT, AHMAD K., SAHER MANASEER, and **RIZIK MH Al-SAYYED.** | "A SURVEY OF DIGITAL FORENSIC METHODS UNDER ADVANCED PERSISTENT THREAT IN FOG COMPUTING ENVIRONMENT." *Journal of Theoretical and Applied Information Technology* 97, no. 18 (2019). *Scopus Q3* |
| Bagaeen, Aroba, Sawsan Al-Zoubi, **Rizik Al-Sayyed**, and Ali Rodan. | "Storage as a Service (STaaS) Security Challenges and Solutions in Cloud Computing Environment: An Evaluation Review." In *2019 Sixth HCT Information Technology Trends (ITT)*, pp. 208-213. IEEE, 2019. |
| Abu-Srhan, Alaa, B. Alhammad, S. Al, and **R. Al-Sayyed**. | "Visualization and Analysis in Bank Direct Marketing Prediction." *Int. J. Adv. Comput. Sci. Appl* 10, no. 7 (2019): 651-657. |
| Alzaqebah, Abdullah, **Rizik Al-Sayyed**, and Raja Masadeh. | "Task Scheduling based on Modified Grey Wolf Optimizer in Cloud Computing Environment." In *2019 2nd International Conference on new Trends in Computing Sciences (ICTCS)*, pp. 1-6. IEEE, 2019. |
| Qaisi, Laila M., Ali Rodan, Kefaya Qaddoum, and **Rizik Al-Sayyed**. | "Customer churn prediction using data mining approach." In *2018 Fifth HCT Information Technology Trends (ITT)*, pp. 348-352. IEEE, 2018. |
| Taha, Nashrawan, **Rizik Al-Sayyed**, and Ali Rodan, eds. | *Social Media Shaping E-Publishing and Academia*. Springer International Publishing, 2017. |

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| **Al-Sayyed, Rizik MH**, Feras F. Namous, AlMonther H. Alkhalafat, Bashar Al-Shboul, and Samar Al-Saqqa. | "New Synchronization Algorithm Based on Delta Synchronization for Compressed Files in the Mobile Cloud Environment." *International Journal of Communications, Network and System Sciences* 10, no. 4 (2017): 59-74. |
| Alqatawna, Ja'far, Alia Madain, Al-Zoubi Ala'M, and **Rizik Al-Sayyed**. | "Online social networks security: Threats, attacks, and future directions." In *Social Media Shaping e-Publishing and Academia*, pp. 121-132. Springer, Cham, 2017. |
| Shaheen, Ameen, **Rizik Al-Sayyed**, and Azzam Sleit. | "Improving visual analyses and communications of ontology by dynamic tree (case study: computer system)." *International Journal of Advanced and Applied Sciences* 4, no. 5 (2017): 62-66. |

### Scientific conferences and symposia

| Conference Title | Place and date of conference | Type of Participation |
|---|---|---|
| 1st International Conference on Online and Blended Learning | The University of Jordan, 23-24 August, 2021 | Chairman |
| The 2nd International Conference on New Trends in Computer Science (ICTCS'19) | Amman – Jordan October 9-11, 2019 | Attendee |
| The 5th International Conference on E-Publishing, ICEPUB2019 | Amman - Jordan 24th - 26th September, 2019 | Scientific and organizing Committee |
| The 4th International Conference on E-Publishing, ICEPUB2018 | Amman - Jordan 10th - 12th September, 2018 | Scientific and organizing Committee |
| The 3rd International Conference on E-Publishing | Amman - Jordan July 25 – 27, 2017 | Scientific and organizing Committee |

### Committees…

*The University of Jordan, King Abdullah II School for Information Technology, (2009 – Present) …*
  – Member of University Council
  – Member / Chairperson of the Curriculum Committee
  – Member / Chairperson of the Graduate Studies Committee
  – Member of College Council
  – Member of Student Affairs Committee
  – Member of the Scientific Research, Conferences, Seminars, and Expositions Committee.
  – Member of the e-Learning Committee.
  – Many other committees on the university and school levels

### Technologies…

  – Packages: Matlab, SPSS
  – Oracle SQL*Plus, PL/SQL, Forms, Reports, MySQL, SQL Server, and MongoDB
  – Programming languages: Python, Visual Basic.Net, C++, Visual C++, Java, Cobol, Pascal, and Assembly
  – Multimedia Tools: Camtasia, Captivate, Photoshop
  – Active Server Pages.Net

## Teaching activities

| Taught Courses | Bachelor | Graduate |
|---|:---:|:---:|
| Database Management Systems | ☒ | |
| Database Languages and Tools (Oracle) | ☒ | |
| Computer Simulation in Business | ☒ | |
| Web applications Development – 2 | ☒ | |
| Social Media Networks | ☒ | |
| Discrete Math | ☒ | |
| PhP Programming | ☒ | |
| Logic Design | ☒ | |
| Computer Skills (C++) | ☒ | |
| Fundamentals of Computer Science | ☒ | |
| Computer Basics | ☒ | |
| Computer Skills for Medical Students | ☒ | |
| Cloud Computing | | ☒ |
| eGovernemnt Infrastructure | | ☒ |
| Research Methodology | | ☒ |
| Special Topics for master | | ☒ |
| MongoDB | | ☒ |
| Information Visualization | | ☒ |
| Special Topics for PhD (Cloud) | | ☒ |

## Graduate Students Supervision

| PhD Supervision | | Master Supervision | |
|---|---|---|---|
| Student Name | Role | Student Name | Role |
| محمود ابراهيم عبد الرحمن مشرف | Main | ليلى محمد محمود القيسي | Main |
| ساره عماد خالد شكري | Main | محمد حسّونة | Main |
| عفاف خليل عطا الله العدينات | Main | المنذر حسن مصطفى الخلفات | Main |
| اسراء محمود سليم الحناوي | Main | أنور / محمدنظام / أنور البشيتي | Main |
| أحمد الحويطات | Main + Co-S. | غدير احمد رشيد قصص | Main |
| فاطمه عمر علي حيمور | Co-supervisor | علي عبدالعزيز جروح السرحان | Main |
| ضحى محمد بسام عارف قطيشات | Co-supervisor | اية منظر حسن طالب | Main |
| | | بسمه مصطفى محمود ارتاحي | Main |
| | | محمد زكريا علي معابده | Main |
| | | ازهار فيصل مرزي الطراد | Main |
| | | فراس فؤاد ناموس | Co-supervisor |
| | | دانة مصطفى احمد محمد | Co-supervisor |

## Professional Development (PD)

### 1. Training courses I attended

| S. | Course Name | HRS | Date(s) | Place |
|---|---|---|---|---|
| 1 | ABET Continuous Improvements | 12 | Many times | JU |
| 2 | ABET Course File Preparation | 12 | Many times | JU |
| 3 | Using LMS Platform | 6 | 11/11/2020 – Online | JU |
| 4 | Using the JUE Exams and ExamBuilder | 6 | 24/11/2021 - Online | JU |
| 5 | Preparing Content for Blended Learning Courses | 6 | 30/6 – 1/7/2021 - Online | JU |
| 6 | Using Advanced Features of MS Teams & Moodle | 6 | 17/11/2021 – Online | JU |
| 7 | Hybrid Learning | 6 | 20/7/2021 – Online | JU |

| S. | Course Name | Duration | Date(s) | Country |
|---|---|---|---|---|
| **2. Training courses I attended** | | | | |
| 1 | Postgraduate Certificate Research Methodology (PGCRM) | 1 Yr | July 2, 2007 | Leeds, UK |
| 2 | ICDL Expert Certificate | 5 Days | Dec. 15, 2008 | Dubai |
| 3 | $IC^3$ Authorized Instructor (CertiPort) | 5 Days | January 6, 2006 | USA |
| 4 | CTP Training Professional | 5 Days | Dec. 6, 2005 | Dubai, UK |
| 5 | All **Advanced** ICDL Exams | Exams | June 12-14, 2007 | UK |
| 6 | Miscrosoft Office Specialist MASTER INSTRUCTOR: Ppt, WRD, ACC, EXC, OUTL | Exams | January 6, 2006 | UK |
| 7 | Miscrosoft Office Specialist in MS Outlook 2002 | Exam | May 24, 2005 | UK |
| 8 | Miscrosoft Office Specialist MASTER: PPT, WRD, ACC, EXC | Exams | May 18, 2005 | UK |
| 9 | Miscrosoft Office Specialist in MS Excel 2002 EXPERT | Exam | May 18, 2005 | UK |
| 10 | Miscrosoft Office Specialist in MS Access 2002 | Exam | May 16, 2005 | UK |
| 11 | Miscrosoft Office Specialist in MS Word 2002 EXPERT | Exam | May 15, 2005 | UK |
| 12 | Miscrosoft Office Specialist in MS PowerPoint 2002 | Exam | May 10, 2005 | UK |
| 13 | Miscrosoft Office Specialist in MS Excel 2002 | Exam | May 8, 2005 | UK |
| 14 | Miscrosoft Office Specialist in MS Word 2002 | Exam | May 7, 2005 | UK |
| 15 | Instructor Certification Program (ICP) – Certified Instructor | 90 Hrs | May 29, 2003 | ExecuTrain, Dubai |
| 16 | Administering MS Windows NT 4.0 | 75 hrs | March 21, 1999 | UAE |
| 17 | Supporting MS Windows NT 4.0 Core Technologies | 75 hrs | April 28, 1999 | UAE |
| 18 | OSF/1 Commands Utilities | 40 Hrs | 7/1/95 - 11/1/95 | Qatar |
| 19 | OSF/1 Technichal Overview | 8 Hrs | 12/1/95 | Qatar |
| 20 | OSF/1 System Administration | 40 Hrs | 30/1/95 - 4/2/95 | Qatar |
| 21 | Introductiom To PC Networking and Integration | 8 Hrs | 14/2/95 | Qatar |
| 22 | Pathworks V5. Basic User | 8 Hrs | 15/3/95 | Qatar |
| 23 | Pathworks V5. Administration | 16 hrs | 16/3/95 - 17/3/95 | Qatar |
| 24 | Oracle SQL*Plus | 32 Hrs | 25/3/95 - 28/3/95 | Qatar |
| 25 | Oracle – Using Procedural Options | 16 Hrs | 29/3/95 - 30/3/95 | Qatar |
| 26 | Oracle SQL*Forms 3.0 | 40 Hrs | 1/4/95 - 5/4/95 | Qatar |
| 27 | Programming in C Language | 40 Hrs | 22/4/95 - 26/4/95 | Qatar |

| 28 | Pathworks V5. Installing and Configuring OSF/1 Server | 24 Hrs | 15/5/95 - 18/5/95 | Qatar |
|----|----|----|----|----|
| 29 | Pathworks V5. Installing and Configuring Mutivendor Client | 24 Hrs | 20/5/95 - 22/5/95 | Qatar |
| 30 | Oracle Report Writer | 24 Hrs | 30/5/95 - 1/6/95 | Qatar |
| 31 | Oracle DBA – I | 32 Hrs | 3/6/95 - 6/6/95 | Qatar |
| 32 | Oracle DBA – II | 32 Hrs | 28/10/95 - 31/10/95 | Qatar |
| 33 | Oracle Forms 4.5 | 32 Hrs | 1/11/95 - 5/11/95 | Qatar |
| 34 | Oracle Reports 2.5 | 32 Hrs | 6/11/95 - 9/11/95 | Qatar |
| 35 | Digital Unix Network Management | 32 Hrs | 11/11/95 - 14/11/95 | Qatar |
| 36 | Digital Unix Security | 24 Hrs | 18/11/95 - 20/11/95 | Qatar |
| 37 | HP-UX Fundamentals and Operations | 10 Days | 5/12/92 | Qatar |
| 38 | IT and Education, St Mark and St John College | 5 Months | 15/3/88 – 5/8/88 | Plymouth, UK |
| 39 | Computer Awareness | 6 Months | 2/1988 - 8/1988 | UK |