## Rafid Sagban

rsagban@alayen.edu.iq

## **PROFILE:**

Dr. Rafid holds a Bachelor in computer sciences from University of Babylon, Babil, Iraq in 2001 and Higher Diploma in data security from Iraqi Commission for Computers & Informatics - Informatics Institute for Postgraduate Studies in 2002, Baghdad, Iraq. His Master's degree and Ph.D in information technology are both from the Northern University of Malaysia, Sintok, Malaysia in 2011 and 2015 respectively. Rafid's research and development experience includes over 15 years in the Academia and Industry. He works in a multi-disciplinary environment involving algorithm analysis, swarm intelligence, business intelligence, internetworking, and web graphics and optimization. As IT specialist, database tracker, database & network manager and IT manager, he has enough experience in prominent international NGO organizations. In 2012, he has been elected as a first chair to the IEEE Students Branch in the Northern University of Malaysia. Furthermore, he is currently member of Machine Intelligence Research Labs, , USA; member of Iraqi Association for IT Specialists, Iraq; member of IEEE Computational Intelligence Society/ IEEE Malaysia Section, Malaysia; and reviewer of several international academic journals and conferences. Last memberships are the editorial board of JUB (section editor), the Journal of University of Babylon, Iraq; Informatics Consulting Bureau (member), University of Babylon, Iraq; the council of Computer Center, University of Babylon, Iraq; the council of Software Department, Faculty of Information Technology, University of Babylon, Iraq; editorial board of JICT, the Journal of Information and Communications Technology, Universiti Utara Malaysia, Malaysia; IEEE UUM Students' Branch (chair), Malaysia; Machine Intelligence Research Labs (member), USA; Iraqi Association for IT Specialists (member), Iraq; and IEEE Computational Intelligence Society (member)/ IEEE Malaysia Section, Malaysia. Last activities are the participation of ICCSCE2014, ICCSCE2015 and ICCSCE2020 conferences in Penang, Malaysia in 2014, 2015 and 2020 respectively; ICOCI2015 conference in Turkey, Istanbul, August 11-13; ICOCI 2017 conference held in Sepang, Malaysia in 17th of April, 2017 and ICIT17 conference held in Amman, Jorden in 17th of May, 2017; ACSAT 2018 conference held in Langkawi, Malaysia in 10th to 12th December 2018.

#### **QUALIFICATIONS / EDUCATION**

- ❖ Associate Professor in Computer Sciences/ A.I, University of Babylon (2021), Iraq
- ♦ Ph.D Information Technology, Northern University of Malaysia (UUM) (2012 2015), Malaysia
- ❖ MS.c Information Technology, Northern University of Malaysia (UUM) (2009 2011), Malaysia
- ❖ H.D Data Security Iraqi Commission for Computers & Informatics Informatics Institute for Postgraduate Studies (2000 − 2002), Baghdad, Iraq.
- ❖ B.SC., Computer Science University of Babylon, (1995 2000), Babil, Iraq

#### **PROFESSIONAL AFFILIATIONS**

- Chair of IEEE UUM Students' Branch, Malaysia
- Member of Machine Intelligence Research Labs, , USA
- Member of Iraqi Association for IT Specialists, Iraq
- ♦ Member of IEEE Computational Intelligence Society/ IEEE Malaysia Section, Malaysia
- Member of Informatics and Computer Systems Consulting Bureau, University of Babylon, Iraq
- ♦ Member of Data Science Research Lab, School of Computing, UUM, Sintok, Malaysia

## **PUBLICATIONS (LAST SEVEN YEARS)**

- ❖ R. Sagban, K. R. Ku-Mahamud, and M. Shahbani, "Reactive memory model for ant colony optimization and its application to TSP," in *Proceedings of ICCSCE2014: The 4th International Conference on Control System, Computing and Engineering*, 2014, pp. 310 − 315. (Scopus)
- ❖ R. Sagban, K. R. Ku-Mahamud, and M. S. A. Bakar, "ACOustic: A Nature-Inspired exploration indicator for ant colony optimization," *Sci. world J.*, vol. 2015, pp. 1–11, 2015. (Scopus)
- ♠ R. Sagban, K. R. Ku-Mahamud, and M. S. A. Bakar, "Reactive Max-Min Ant System: An Experimental Analysis of the Combination with K-Opt Local Searches," in *Proceedings of ICOCI 2015: 5th International Conference on Computing and Informatics*, 2015, pp. 300 306. (Scopus)
- R. Sagban, K. R. Ku-Mahamud, M. Shahbani, and A. Bakar, "Nature-Inspired Parameter Controllers for ACO-based Reactive Search," *Res. J. Appl. Sci. Eng. Technol.*, to be appeared in 25 of Sept., 2015 in 1 (9). (Scopus)
- \* R. Sagban, K. R. Ku-Mahamud, and M. S. A. Bakar, "Reactive max-min ant system with recursive local search and its application to TSP and QAP," *Intell. Autom. Soft Comput.*, vol.23 (1), pp.127-134, 2017. (Scopus/ISI)
- R. Sagban, K. R. Ku-Mahamud, and M. S. A. Bakar, "Unified strategy for intensification and diversification balance in ACO metaheuristic," in *Proceedings of ICIT 2017: 8th International Conference on Information Technology*, 2017, pp. 139-143. (Scopus)
- R. Sagban, "Reactive approach for automating exploration and exploitation in ant colony optimization," unpublished doctoral thesis submitted to Information Technology Department, School of computing, Universiti Utara Malaysia, 2016
- Alameer, I. A., & Sagban, R. (2019). "A comparative evaluation of parameter adaptation methods in ant colony optimization," *Journal of Computational and Theoretical Nanoscience*, 16(3), 1182–1189. <a href="https://doi.org/10.1166/jctn.2019.8014">https://doi.org/10.1166/jctn.2019.8014</a> . (Scopus)

- Al-Behadili, H. N. K., Ku-Mahamud, K. U. R., & Sagban, R. (2018). "Ant Colony Optimization Algorithm For Rule-Based Classification: Issues And Potential Solutions," *Journal of Theoretical and Applied Information Technology*, 96(21). (Scopus)
- ❖ AL-Behadili, H. N. K., Ku-Mahamud, K. R., & Sagban, R. (2019). "Annealing strategy for an enhance rule pruning technique in ACO-based rule classification," *Indonesian Journal of Electrical Engineering and Computer Science*, 16(3), 1499–1507. https://doi.org/10.11591/ijeecs.v16.i3.pp1499-1507. (Scopus)
- ❖ Al-Behadili, H. N. K., Ku-Mahamud, K. R., & Sagban, R. (2020). "Hybrid ant colony optimization and iterated local search for rules-based classification," *Journal of Theoretical and Applied Information Technology*, 98(4), 657–671. (Scopus)
- ❖ AL-Behadili, H. N. K., Ku-Mahamud, K. R., & Sagban, R. (2020). "Hybrid ant colony optimization and genetic algorithm for rule induction," *Journal of Computer Science*, 16(7), 1019–1028. https://doi.org/10.3844/JCSSP.2020.1019.1028. (Scopus)
- ❖ Al-Behadili, H. N. K., Ku-Mahamud, K. R., & Sagban, R. (2018). "Rule pruning techniques in the ant-miner classification algorithm and its variants: A review," ISCAIE 2018 2018 IEEE Symposium on Computer Applications and Industrial Electronics, 78–84. https://doi.org/10.1109/ISCAIE.2018.8405448. (Scopus)
- ❖ Al-Behadili, H. N. K., Sagban, R., & Ku-Mahamud, K. R. (2020). "Adaptive parameter control strategy for ant-miner classification algorithm," *Indonesian Journal of Electrical Engineering and Informatics*, 8(1), 149–162. https://doi.org/10.11591/ijeei.v8i1.1423. (Scopus)
- ❖ Jabbar, A. M., Sagban, R., & Ku-Mahamud, K. R. (2019). "Balancing exploration and exploitation in ACS algorithms for data clustering," *Journal of Theoretical and Applied Information Technology*, 97(16). (Scopus)
- ❖ Jabbar, A. M., Ku-Mahamud, K. R., & Sagban, R. (2019). "Modified ACS centroid memory for data clustering," *Journal of Computer Science*, 15(10), 1439–1449. https://doi.org/10.3844/jcssp.2019.1439.1449. (Scopus)
- ❖ Jabbar, A. M., Ku-Mahamud, K. R., & Sagban, R. (2020). "An improved ACS algorithm for data clustering," Indonesian Journal of Electrical Engineering and Computer Science, 17(3), 1506–1515. https://doi.org/10.11591/ijeecs.v17.i3.pp1506-1515. (Scopus)

#### AWARDS

- ♦ Best technical paper award of ICOCI 2015, 5<sup>th</sup> International Conference on Computing and Informatics, Turkey, Istanbul, August 11-13, 2015. Paper details: R. Sagban, K. R. Ku-Mahamud, and M. S. A. Bakar, "Reactive Max-Min Ant System: An Experimental Analysis of The Combination with K-Opt Local Searches.
- ♦ Medal of creativity award of 3<sup>rd</sup> International Conference of Creativity, Iraq, Babil, March 4-4, 2020.

#### EDIT. BOARDS/INT. COMMITTEES

- International Conference ICCSCE2015: The 5th International Conference on Control System, Computing and Engineering, ParkRoyal Penang Sort, Penang, Malaysia, 2015
- ❖ International Conference ICOCI 2017: 6th International Conference on Computing and Informatics, Sama-Sama Hotel, KLIA Sepang, Malaysia, 25-17 April, 2017
- ❖ International Conference ICIT17: The 8<sup>th</sup> International Conference on Information Technology , Amman, Jorden , May 17, 2017
- ❖ Journal of University of Babylon (JUB), ISSN: 1992-0652, official journal of University of Babylon in Iraq.
- ❖ Journal of information and Communication Technology (JICT), official journal of Universiti Utara Malaysia in Malaysia. (Scopus)
- ❖ International Journal of Reasoning-based Intelligent System. Inderscience Publisher (Scopus)
- International Journal of Web-based Learning and Teaching Technologies, IGI Global Publisher (Scopus)

## **POSITIONS**

## ♦ Dean, 2021–, Technical Engineering College, Al-Ayen University, Thi-Qar, Iraq

Responsible for verifying the academic, programmatic, managerial, and fiscal activities and the adequacy of college, monitoring the academic integrity, confer degrees, and responsible for student recruitment, admission, and academic progress and for the ethical conduct of research, establishing and maintaining a culture of compliance and integrity among faculty, staff, and students, providing local direction and resources for the education, training, and implementation of federal, state, and local regulations and university and sponsoring agency policies and procedures, resolving any significant issues of noncompliance, and also reducing the risk of future occurrences.

#### ♦ Manager, 2019 –2020, Computer Center, University of Babylon

Plan, arrange and control activities of the computer systems analysis section at the University of Babylon. Plan, organize, and oversee activities of professional and technical staff engaged in setting new or revised information

systems. Design, implement and maintain systems monitoring Divisions of CC department and CC department performance.

## ♦ Education Coordinator, 2018 –2019, Department of Software, Faculty of Information Technology, University of Babylon

Enhancing student learning, classroom teaching innovation, research investigations, and formal and informal assessment that demonstrates student academic achievement in I.T Faculty/ S.W Dept.

## ♦ Chair, 2013 –2014, IEEE UUM Students' Branch, School of computing/Universiti Utara Malaysia

To be an effective IEEE student branch chair you have to possess effective leadership skills! As Chair, Sagban was responsible for the overall management of all Branch affairs. He learned how to use the skillful art of delegating. The size and range of activity of my Branch dictated how much responsibility he should delegate to other members of the Executive Committee. He took every opportunity to promote the benefits of IEEE membership to fellow students.

#### ♦ IT Manager, January, 2008 –2009, International Relief and Development, Babil, Iraq

As IRD/CSP IT Manager, he was responsible for the technical operation of the IRD/CSP Hilla IT systems and telecommunication. He has served as the network administrator and responsible for the operation and maintenance of the system. These responsibilities include but are not limited to responsibility for computer operations, support of applications systems, safekeeping of data, the installation, maintenance and repair of all hardware, telecommunications, and systems development. He supports everyday computer work of IRD/CSP Hilla employees. This includes support in text processing software, spreadsheet software, graphics software and all other software that is in use in IRD/CSP Hilla office. IRD program has been stopped end of 2009 to be the startup for his Master study.

#### ♦ IT & Network Manager, April, 2006 – 2008, Babylon University, Babil, Iraq

As IT & Network Manager, he was responsible for LAN Installation and maintaining for all university HQ building and solving colleges computers problems; Training university HQ staff; Installing & maintaining university PC's and Network management system.

# ♦ Data Base Tracking & Operations Assistant , Nov, 2003 – 2006, CHF /ACSI Program/Main Office Babil/Iraq

In this position, he was responsible for Marinating SQL server data base system & Solving data base sharing problems, Design data base reports using SQL language, Train branches employees about how to track & treat with reports that's out from SQL Server data base and he was Member of group that responsible of upgrading SQL Server database to Oracle 9i data base (web-based data base).

#### ACADEMIC ACTIVITIES (LAST FIVE YEARS)

- ♦ 1<sup>st</sup> Babylon International Conference on Information Technology and Science (BICITS'21), sessions chair, 28-29 April 2021 at University of Babylon, Iraq
- ♦ 5<sup>th</sup> International Safety and Security Coordinating Conference (CBRN(, **scientific committee member**, 19-21 April at University of Babylon, Iraq
- ❖ 7th International Conference on Computing and Informatics (ICOCI2019), **technical committee member**, 27-29 March 2019 at Bangkok, Thailand.
- 5th International Conference on Computing and Informatics (ICOCI2015), presenter, 11-13 August 2015 at Istanbul, Turkey.
- 4th International Conference on Control System, Computing and Engineering (ICCSCE2014), presenter, 28-30 November 2014 at Penang, Malaysia.
- ♦ WEB 2.0 Tools to Support Teaching and Learning Activities Workshop, **co-chair and facilitator**, Saturday, 23th August 2014 at SMK Megat Dewa, Kodiang, Kedah.
- ❖ Robot Demonstration by Dr. Azizi Azizi, **organizer**, Tuesday, 30 September 2014 at InterNetworks Research Lab, School of Computing, Northern University of Malaysia (UUM).
- **♦** EXPO2014 of SOC, **co-organizer**, Wednesday, 2014 at School of Computing, Northern University of Malaysia (UUM).
- ♦ 5th International Conference on Computing and Informatics (ICOCI2015), presenter, 11-13 August 2015 at Istanbul, Turkey.
- ♦ Who Run The Net: Understanding Internet Governance by Prof. Dr. Suhaidi Hassan SMIEE, **organizer**, Thursday, 22th May 2014 at Auditorium Seminar Hall, School of Computing, Northern University of Malaysia (UUM).
- ❖ IEEE Educational Program: Celebrating IEEE Day with Orphans, **organizer**, Sunday, 28th September 2014 at Northern University of Malaysia (UUM) Sintok campus.
- ❖ IEEE Region 10 Leadership Forum, participant, Monday, 14th April 2014 at Berjaya Times Square, Kuala Lumpur.
- Comsoc/VTS Annual General Meeting, participant, Saturday, 25th January 2014 at Palm Garden Hotel, IOI Resort.
- ❖ 24th Annual General Meeting of IEEE MALAYSIA SECTION, **participant**, Saturday, 25th January 2014 at Palm Garden Hotel, IOI Resort.
- ♦ MAJLIS ANUGERAH KERANA JASA UUM CAS 2014 (AKJ), co-organizer, Friday, 12th December at EDC UUM.
- ❖ IEEE Malaysia Congress 2014, participant, Sunday, 9th November at UKM.

## PERSONAL DETAILS & SPECIAL SKILLS

Nationality: Iraqi

**♦** DOB: 7, 7, 1977

Marital status: Married

❖ Management: small business microfinance

Software development: Algorithms

❖ Programming languages: C, C++, C#

♦ Other IT experience: Microsoft Exchange Server, Microsoft ISA, Microsoft RRAS (Configuring Windows Server as a Router, Remote Access Server, NAT Server, and establishing VPNs), Microsoft RIS, Microsoft Terminal Services, Security of LAN traffic through IPSEC policies, Remote connections through L2TP/IPSEC, CISCO switches/routers configuration (CCNA Level).