Dr. Zaid Ghanim Ali

zaid.ghanim@muc.edu.iq

Go to Google Scholar Citations Index

***ORCID** - Open Researcher and Contributor ID*

Current position is head of laboratory department in AL-Mansour University College.

Experience

2010 – PRESENT

Faculty staff member, AL-Mansour University College

Teaching in Computer Engineering Department, (formerly Department of Software Engineering)

1. 2022-present: Laboratory department manager.
2. 2022 : Holds an **Engineering Program Evaluator** certificate from the Iraqi Ministry of Higher Education
3. 2019 - 2021: Editorial Manager of scientific magazine (Al-Mansour Magazine, ISSN: 18196489).
4. 2018: member of Scientific committee of Al Mansour International Conference on new Trends in Computing, Communications, and Information Technology (NTCCIT-2018)(IEEE conference).(go to site).
5. 2019- present: scientific committee member of computer engineering department.
6. 2017 - 2019: Department Rapporteur of Software Engineering and Information Technology.
7. 2017: Modernization committee and purchase books to the college library.
8. 2015 - Present: An official member in the **Iraqi Council of Accreditation for Engineering Education (ICAEE)** in the Iraqi ministry of higher education. (The aim is to implement ABET criteria in the Iraqi Engineering Universities).
9. 2014 - 2016: Member of examination committee.
10. 2014 - 2021: Member in committee of pedagogies guidance

2009

Lecturer, Dijlah College

One year as external lecturer due to another work commitment. I taught in Computer Engineering department.

2008 - 2010

Project Manager, Vizocom Company (for Networks and Communication Systems).

Project manager for VSAT system (Very Small Aperture Terminal)- (communication through satellite). The project includes 155 sites around the republic of Iraq (from North to South).

2004 – 2007

System Engineer, Al-Iraq National Company for Mechanical & Electrical Projects (Branch of Kharafi National) Company
Main job in the field of communication, install and configure VSAT systems equipment to provide voice and internet connection (including Nortel telephone exchanges station).

2003 - 2004
Head of Computer Networks Department, Ministry of Science and Technology.
Research and industrial development center: Electronic design center.
1996 - 2003
Head of Computer Interface Department, Ministry of Industry
I worked as manager for many projects. Each project started from the design phase to meet the requirements of the end user (after long discussions), assent of the project from higher authority, administrative work, tools, components, transportation, manpower management, depot…..etc. until getting the ratification from Iraqi Quality Control to the product.
1988 – 1996
Engineer within Research Group, Industrial Committee: The Research and Development of Industry

1. At the beginning of my career, I worked on the reception of foreign companies' delegations and attending the scientific negotiations of projects implementation as rapporteur.
2. I worked in the development of different military equipment and weapons (such as Tanks, Artillery, air forces, Radars, Armored Corps).
3. Worked for two years in the rehabilitation of Baiji refinery after the war, which took place in Iraq 1990

Education

2014
PhD. degree in Computer Engineering, School of computer and communication engineering University Malaysia Perlis - Perlis - Malaysia.
THESIS TITLE: Resource Allocation Framework for Downlink Subframe of Mobile WiMAX.
Thesis research is about managing the allocation of downlink radio resources for Mobile WiMAX base station. Downlink resource management is the process of allocating scarce-shared resources among subscribers in the downlink direction. The main and common problem of resource allocation management is resource wastage, which is directly translated to a decline in the overall performance of Mobile WiMAX system, since it represents bandwidth shortage which adversely affects all Mobile WiMAX system participants and vice versa. Research of the thesis presents a novel design of dynamic resource allocation framework for Mobile WiMAX base station that focuses on optimum resource wastage reduction to increase utilization efficiency of the downlink channel bandwidth.
2004
M.Sc. degree in Computer Engineering, Computer Engineering Department - University of Technology - Baghdad - Iraq.
THESIS TITLE: Design and Implementation of a Universal Serial Bus Application.

1988

B.Sc. degree in Electrical & Electronic Engineering, Military Engineering Collage - Baghdad – Iraq

Academic Activities

- **Undergraduate Teaching Topics**
  1. System software.
  2. Microprocessor.
  3. Computer architecture.
  4. Operating Systems.
  5. Introduction to computer system.
  6. Computer security.
  7. Information theory and error control coding.
  8. Real time systems.
  9. Electronic circuits II.
  10. Digital Signal Processing
  11. Electrical circuits I
  12. Computer networks
- **Reviewer**

  1. Wireless Personal Communications Springer Journal.
  2. IEEE Transactions on Communications.
  3. Journal of communications and information sciences.
  4. Business Engineering and Industrial Applications Colloquium (BEIAC), 2013 IEEE.
  5. International Conference on Electronic Design (ICED), 2014 IEEE.
  6. Science Publications (Science, Technology and Medicine publisher).
  7. AL-Mansour Journal issued in AL-Mansour University College.
  8. Al Mansour International Conference on new Trends in Computing, Communications, and Information Technology (NTCCIT-2018)
- **Supervision of Undergraduate Project**

  12 undergraduate students (2009-2018).
- **Membership**

  1. IEEE Member: #92771212- Malaysian Section.
  2. ACM Client Number: 5681005 Iraq Chapter.
  3. SCOPUS Author ID: 55837635000 (go to site)
  2. Google Scholar Citations Index.(go to site)
  3. Social network for scientists and researchers (ResearchGate).(go to site)
  4. ORCID - Open Researcher and Contributor ID.(go to site)
  5. Iraqi Engineer Union: #53159.

Skills

- Design and implementation of testing equipment for electronic devices by using computer or without.
- Design and implementation of an interface card using AT-card.
- Design and implementation of analog to digital card using AT-card.

- Implementation of electronic card by reverse engineering.
- Design and implementation of many projects in computer interface field (from design to the end user product).
- Repairing of electronic cards.
- Maintenance of electronic systems.
- Installation and maintenance of Alarm Systems.
- Installation and maintenance of Fire Alarm Systems.
- Use splicing machine for fiber optic cables.
- PCs maintenance (software & hardware).
- Installation and maintenance of VSAT systems.
- Maintenance of internet networking.
- Installation of wireless computer networks.
- Design and management of harness implementation for computer networks (combination of fiber optic & UTP).
- Installing of microwave communication system.
- Installation and maintenance of security cameras system.

Publications

Book Chapter

1- *Zaid G. Ali*, R. B. Ahmad, Abid Yahya, L. A. Hassnawi, "*Mobile WiMAX Resource Allocation Design Goals: key features/factors/issues*", Advanced in Computer Science and its Applications Lecture Notes in Electrical Engineering Volume 279, 2014, pp 661-667, DOI 10.1007/978-3-642-41674-3_95, (ISSN:1876-1100). Publisher (Springer Berlin Heidelberg).

International Journal

1- Sinan Sameer Mahmood Al-Dabbagh, Nawaf Hazim Barnouti, Mustafa Abdul Sahib Naser, ***Zaid G. Ali*** "Parallel Quick Search Algorithm for the Exact String Matching Problem Using OpenMP" Journal of computer and communication, 2016 Oct 18;4(13):1. DOI: 10.4236/jcc.2016.413001. **Impact Factor (2-GJIF) is 1.09**.

2- Khaldoon, Md Mijanur Rahman, r. Badlishah Ahmad, ***Zaid G. Ali***, and la hassnawi. "Robust Model for DOA Estimation and Interference Cancellation In Multi-Signals Environment" Journal of Theoretical & Applied Information Technology Vol.77, no. 1 (2015). **Indexed by Elsevier SCOPUS**.

3- *Zaid G. Ali*, R. B. Ahmad, L. A. Hassnawi "Quantification of design challenges and performance Assessment of WiMAX Resource Allocation Algorithms" Wireless Personal Communications, Volume 81, Issue 1, (pp.189–205) March 2015 Springer Journal. DOI: 10.1007/s11277-014-2123-2, **Impact factor 0.951**.

4- *Zaid G. Ali*, R. B. Ahmad, L. A. Hassnawi, Omar K. "*Method for Optimize Data Fragmentation and Allocation within Spectrum Resources of Mobile WiMAX Systems*" International Journal of advancement in computer technology (IJACT). Volume 6, Number 2, March 2014. (pp. 1-10).Indexed by **SCOPUS and Google Scholar.**

5- *Zaid G. Ali*, R. B. Ahmad, Abid Yahya. "*Burst Fragmentation Model B ased on Sequential Burst Allocation Algorithm for Mobile WiMAX*". International Journal of Soft Computing and EngineeringTM (IJSCE), ISSN: 2231-2307, Volume-3, Issue-3, (pp. 123-129) July 2013**,** ISO 9001:2008 Certified International Journal, **Impact Factor:1.0**

6- *Zaid G. Ali,* *R. B.* Ahmad, Abid Yahya, L. A. Hassnawi, Zeyad Ibraheem. "*Improve Downlink Burst Allocation to Achieve High Frame Utilization of Mobile WiMAX (802.16e)*" International Journal of Computer Science Issues (IJCSI), Vol. 9, Issue 6, No 3, November 2012, **impact factor: 0.242**, indexed by **Elsevier link**.

7- L. A. Hassnawi, R.B Ahmad, Abid Yahya, M. Elshaikh, Ali Al-Rawi, **Zaid. G. Ali**, "*Performance Analysis of Motorway Surveillance System Based on Wireless Ad Hoc Camera Network (WAHCN)",* Journal of Communications and Information Sciences (JCIS) Volume2. Number1. April. 2012. *Publisher*: *AICIT Korea*. Indexed by **EBSCO, INSPEC and Google Scholar.**

8- L. A. Hassnawi, R.B Ahmad, Abid Yahya, S. A. Aljunid, **Zaid.G. Ali**,*" A new Design for a Motorway Surveillance System Using a Wireless Ad-Hoc Camera Network to Improve Safety* **"**The Arabian Journal for Science and Engineering (AJSE) 2012 Scopus, Springer Link. **Impact factor:0.34**

9- L. A. Hassnawi, R.B Ahmad, Abid Yahya, S. A. Aljunid, **Zaid G. Ali, "** *Performance Analysis of Workload Effects over Motorway Wireless Ad Hoc Camera Networks"* International Journal of Advancements in Computing Technology(IJACT). 06/2013; 5(10):117-125. Indexed by **SCOPUS**.

10- L. A. Hassnawi, R.B Ahmad, Abid Yahya, S. A. Aljunid, Zaid G. Ali *"Evaluation of Topology Effects on the Performance of Motorway Surveillance System"* International Journal of Advances in Computer Networks and its Security (IJCNS) 2012 **CROSSREF, SEEK Digital Library, and Google Scholar.**

11- Ali A. Ahmed, R.B. Ahmad, S. A. Alobaidi, Abid Yahya, L.A. Hassnawi, **Zaid.G. Ali** "*Sliding Mode Simulation and Robustness Controller*" Journal of Next Generation Information Technology 2012 **EI Elsevier Link**, **Scopus, EBSCO, INSPEC, and Google Scholar.**

International Conferences

1- *Zaid G. Ali*, R. B. Ahmad, Abid Yahya, L. A. Hassnawi, L. A. Aldhaibani, (2013, April). "*Low complexity burst allocation algorithm with high frame utilization for Mobile WiMAX (802.16e)*". In Business Engineering and Industrial Applications Colloquium (BEIAC), 2013 IEEE (pp. 404-409), indexed by **SCOPUS, IEEE**.

2- *Zaid G. Ali*, R. B. Ahmad, Abid Yahya, J. A. Aldhaibani. "*Mobile WiMAX Resource Allocation Algorithms Guidelines and Performance Assessment*", 2013 IEEE 11th Malaysia International Conference on Communication (MICC2013), indexed by **SCOPUS, IEEE**.

3- *Zaid G. Ali*, R. B. Ahmad, Abid Yahya, L. A. Hassnawi, "*Mobile WiMAX Resource Allocation Design Goals: key features/factors/issues*", International Symposium on System Engineering and Computer Simulation (SECS-2013), a workshop of the 5th FTRA International Conference on Computer Science and its Applications (CSA 2013). Indexed by **Springer, EI and SCOPUS**.

4- Aldhaibani, J. A., Abid Yahya, R. B. Ahmad, Omar, N., & ***Zaid G. Ali***. (2013, April). "*Effect of relay location on two-way DF and AF relay for multi-user system in LTE-A cellular networks*". In Business Engineering and Industrial Applications Colloquium (BEIAC), 2013 IEEE (pp. 380-385), indexed by **SCOPUS, IEEE**.

5- Aldhaibani, J. A. Abid Yahya, R. B. Ahmad, ***Zaid G. Ali.*** "*Enhancing Link Quality in a Multi-hop Relay in LTE-A Employing Directional Antenna*" 2013 IEEE International RF and Microwave Conference (RFM 2013), indexed by **SCOPUS, IEEE**.

6- L. A. Hassnawi, R.B Ahmad, Abid Yahya, M. Elshaikh,Ali A. Al-Rawi, **Zaid. G. Ali**, S. A. Aljunid "*Measurement Study on the End-To-End Data Transmission in Motorways Surveillance System Using Wireless Ad Hoc Camera Networks (WAHCN)".* In International Conference on Engineering Industry ICEI2011 Korea, IEEE Symposium on Wireless Technology & Applications, 2011 indexed by **SCOPUS, IEEE**.

7- L. A. Hassnawi, R.B Ahmad, Abid Yahya, S. A. Aljunid, **Zaid G. Ali,** "*Packet Size and Packet Rate effects over Motorway Surveillance System Network Performance*". In 8th International Conference

on Information Processing, Management and Intelligent Information Technology (ICIPM, ICIIP) 2013 ACM, indexed by **SCOPUS, IEEE.**

8- L. A. Hassnawi, R.B Ahmad, Abid Yahya, **Zaid G. Ali**, S. A. Aljunid, "*Evaluation of Topology Effects on the Performance of Motorway Surveillance System".* In International Conference on Advances in Mobile Networks and Communication (MNC 2012) indexed by **CROSSREF, SEEK Digital Library, and Google Scholar.**

9- M. K Salman, RB Ahmad, **Zaid G. Ali**, Rashid A. Fayadh, Jaafar A. Aldhaibani,*" Analyzing Mobile WiMAX Base Station Deployment Under Different Frequency Planning Strategies"* International Conference on Mathematics, Engineering & Industrial Application 2014 (ICoMEIA 2014). Indexed by **SCOPUS, IEEE**

Awards, Thanks & Appreciation, And Patents

- Award

Exhibitions (Awards / Medals)

1- **Gold Medal:** Layth A. Hassnawi, R. Badlishah Ahmad, ***Zaid G. Ali***, **"***A Newly Designed Motorway Wireless AD HOC Camera Network System to Improve Physical Safety***" ITEX 2014** (**25th** International Invention, Innovation &Technology Exhibition).

2- **Silver Medal:** R. Badlishah Ahmed, ***Zaid G. Ali***, Layth A. Hassnawi, Jaafar A., Omar Kh. "*Design And Modeling of A New Downlink Resource Allocation (SBA) Framework For Mobile WiMAX*" EKSPO REKACIPTA DAN PAMERAN PENYELIDIKAN **UniMAP Exhibition 2014.**

3- **Silver Medal:** R. Badlishah Ahmad, ***Zaid G. Ali***, Abid Yahya, Layth A. Hassnawi **"***Continuous Resource Allocation Framework with Numbered Fragments for the Downlink Subframe of Mobile WiMAX (802.16e)***" ITEX 2013** (**24th** International Invention, Innovation &Technology Exhibition).

4- **Silver Medal:** R. Badlishah Ahmad, ***Zaid G. Ali***, Abid Yahay, Layth A. Hassnawi, "*Efficient Frame Resource Management of Mobile WiMAX (802.16e)*" EKSPO REKACIPTA DAN PAMERAN PENYELIDIKAN, **UniMAP Exhibition 2013**.

5- **Silver Medal:** Abid Yahya, Badlishah Ahmed, Ali Amer Ahmed, Dh. Najim, ***Zaid G. Ali***, Layth A. Hassnawi, "*Tuning of Sliding Mode Controller for DC Motor Using DSP Kit*" EKSPO REKACIPTA DAN PAMERAN PENYELIDIKAN **UniMAP Exhibition 2012.**

6- **Bronze Medal:** Muataz H. Salih,R. Badlishah Bin Ahmad, Abid Yahya, **Zaid G. Ali,** Mohammad Khalid, "*Reconfigurable Embedded Computing and Controller Board (RECCB)*" EKSPO REKACIPTA DAN PAMERAN PENYELIDIKAN **UniMAP Exhibition 2011.**

- Appreciation

Three appreciations:

1- From Minister of Higher Education and Scientific research in Feb. 2018, 2019, 2021,2022
2- From Al-Mansour University College in 2018, 2019, 2020, 2021, 2022

- Patents

1- R. B Ahmad, Zaid G. Ali, Abid Yahya, L.A. Hassnawi, "Continuous Resource Allocation Framework with Numbered Fragments for the Downlink Subframe of Mobile WiMAX (802.16e)", Patent Ref. number: PT/4530/UniMAP/13, 19 March 2013.

2- R. B Ahmad, L. A. Hassnawi, Zaid G. Ali, Abid “A New Design for A Motorway Wireless AD-HOC Camera (WAHCH)” Patent Ref. number: PT/4551/UniMAP/ March 2013.