

**CURRICULUM VITAE**  
**Professor Dr. Balqies Sadoun**  
September 2020

**Biography:**



**Balqies Sadoun** received her M.S. and Ph.D. degrees from The Ohio State University, Columbus, Ohio, USA, where she was on a scholarship. She also received an M.S. in Civil Engineering from the Ecole Nationale Des Travaux Publique de LEtat, Lyon, France. Currently, she is a Professor at the Department of Architectural Engineering at University of Sharjah, UAE and has served as a Professor at the in the Department of Civil Engineering and Department of Surveying Engineering and Geomatics, College of Engineering, at the Al-Balqa' Applied University, Jordan. She has published over One Hundred (100) refereed journal and conference papers. She served as a Department Chair more than once. She worked earlier at City University of New York, USA and Jordan University of Science and Technology, Jordan. Her research interests include: Geographical Information Systems (GIS) and Remote Sensing, Passive Solar Design, Wireless Navigation Systems and Networks, Data Analytics, Transportation Systems, Smart Homes and Cities, and Modeling and Simulation, among others.

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## **DEGREES:**

-Ph.D. in City and Regional Planning Engineering, College of Engineering, The Ohio State University, Columbus, Ohio 43210, USA, December 1992.

-M.S. in City and Regional Planning Engineering, College of Engineering, The Ohio State University, Columbus, Ohio 43210, USA.

-M.S. in Civil Engineering, Ecole Nationale Des Travaux Publique d'Etat, Lyon, France

-B.S. in Civil Engineering, College of Engineering, Ain Shams University, Cairo, Egypt.

## **PROFESSIONAL EXPERIENCE:**

- September 2020-Presnet: Visiting Professor, Department of Architectural Engineering, University of Sharjah, UAE.

- 2008- Present, Full Professor, Departments of Civil Engineering and Surveying and Geomatics Engineering, College of Engineering, Al-Balqa' Applied University, Al-Salt, Jordan.

- September 2009-September 2010- On Sabbatical Leave as a Full Professor, Departments of Civil Engineering and Architectural Engineering, College of Engineering, Philadelphia University, Jordan.

-Fall 2005-June 2008, Associate Professor, Department of Surveying and Geomatics Engineering, College of Engineering, Al-Balqa' Applied University, Al-Salt, Jordan.

-Fall 2003-Fall 2005, Chairperson and Associate Professor, Department of Surveying and Geomatics Engineering, College of Engineering, Al-Balqa' Applied University, Al-Salt, Jordan.

-Fall 2002-2003, Associate Professor, Department of Surveying and Geomatics Engineering, College of Engineering, Al-Balqa' Applied University, Al-Salt, Jordan.

-Fall 2000-2002, Assistant Professor, Department of Surveying and Geomatics Engineering, College of Engineering, and Department of Spatial Planning, Al-Balqa' Applied University, Al-Salt, Jordan.

-Fall 1997-2000, Chair and Assistant Professor, Department of Architectural Engineering, Applied Science University, Amman, Jordan.

-December 1992-1997, Assistant Professor, Department of Civil Engineering, City University of New York, New York, USA.

-Fall 1988-1992 Graduate Student/Researcher, College of Engineering, The Ohio State University, Columbus, Ohio 43210, USA.

### **PROFESSIONAL SOCIETIES:**

-Member, The Society for Modeling and Simulation International, SCS.

-Member of ASCE

-Member, American Planning Association

-Member, Association of Jordanian Engineers

### **PUBLICATIONS:**

106. Y. Xie, Y. Guo, T. Zhou, Z. Mi, Y. Yang, **B. Sadoun**,” "A Strategy to Alleviate Rush Hour Traffics in Urban Areas Based on School-Trip Commute Information," *IEEE Systems Journal*, 2020.

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101. N. Yang, Z. Mi, Yu Guo, **B. Sadoun**, and M. S. Obaidat,” Fast Local Map Construction of Robot Using Semantic Priors,” Proceedings of the 2020 IEEE International Conference on Communications, Computing, Cybersecurity and Informatics, CCCI 2020, Nov 2020.

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50. B. Saleh and **Balqies Sadoun**,” Design and Implementation of a GIS System for Planning,” Journal of Digital Libraries, Springer-Verlag, Vol. 6, No. 2, pp. 210-218, April 2006.
49. Omar Al-Bayari and **Balqies Sadoun**,” New Centralized Automatic Vehicle Location Communications Software System Under GIS Environment,” International Journal of



Communication Systems, John Wiley & Sons, Vol. 18, No. 9, pp. 833-846, November 2005.

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4. M. S. Obaidat and **Balqies Sadoun**," A Neural Network Paradigm and Its Performance", Proceedings of the Fifth Workshop on Neural: Academic/Industrial/NASA/Defense, pp. 263-268, San Francisco, Nov. 1993.
3. **Balqies Sadoun**," An experiment to Choose the Optimal Solar Access Site Design in Planning", Proceedings of the 1992 International Simulation Technology Conference, pp. 621-625, Houston, TX, Nov. 1992.
2. **Balqies Sadoun**," A modeling Methodology for Energy Conserving Site design", Presented at the 34th Annual Association of Collegiate Schools of Planning", Columbus, Ohio, October 1992.
1. **Balqies Sadoun**,"A Methodology for Defining the Solar Access in Site Planning", Proceedings of the 1992 Modeling and Simulation Conference, pp. 882-888, Pittsburgh, Pa, May 1992.

**LANGUAGES:**

-Fluent in English, French, and Arabic.

**TEACHING EXPERIENCE:**

-I have taught many courses including:

- Surveying 1
- Surveying 2
- Concrete Design
- Building Technology
- Structural Analysis
- High Rises
- Advanced Building Construction Systems.
- Building Construction 1
- Building Construction 2
- Building Construction 3
- Engineering Drawing
- Energy Conserving Designs
- Statics
- Dynamics
- Strength of Materials
- Transportation Engineering
- Passive Solar Design
- Concrete Design
- Analytic and Descriptive Geometry
- Surveying Lab
- Properties of Materials
- Properties of Materials Lab
- Environmental Planning
- Engineering Economy
- Quantitative Methods for City and Regional Planning.
- Computer Techniques for City and Regional Planning
- Theory of City Planning
- AutoCad
- Surveying Quantities
- Geographical Information Systems, GIS
- Engineering Economy

**PROFESSIONAL ACTIVITIES:**

-Session Chair, IEEE International Conference on e-Business, ICE-B 2010, ICE-B 2011, ICET-B 2012, ICE-B 2013, ICE-B 2014, ICE-B 2015, CITS 2016, CITS 2017, CITS 2018, CITS 2019, SIMULTECH 2017, SIMULTECH 2019.

- International Liaisons, CITS 2012, CITS 2013, CITS 2014 to CITS 2020.
- Program Committee Member, IEEE International Conference on e-Business, ICE-B 2011.
- Program Committee Member, IEEE International Conference on Computer Systems and Applications, AICCSA 2009, 2009.
- Track Chair, IEEE International Conference on Computer Systems and Applications, AICCSA 2009, 2009.
- External Examiner for a Ph.D. Dissertation for Ms. Hakmia Kadri-Dahmani, University of Rouen, France, 2005.
- Program Committee Member, IEEE International Conference on Computer Systems and Applications, AICCSA 2009, 2009.
- Program Committee Member, IEEE International Conference on Computer Systems and Applications, AICCSA 2007, 2007.
- Track Chair, IEEE International Conference on Computer Systems and Applications, AICCSA 2007, 2007.
- Member of the Organizing Committee, 24<sup>th</sup> Arab Engineering Conference (AEC2007), Amman, Jordan, May 2007.
- Social Event Chair, IEEE International Conference on Computer Systems and Applications, AICCSA 2007, 2007.
- Member of the Team of the EU-TEMPU Project on Teaching and Training between University of Paris-13, Le Havre University, Al-Balqa' Applied University, and Philadelphia University, 2006.
- Session Chair: 2006 Summer Computer Simulation Conference, SCSC 2006
- Special Session Organizer, Applications and Case Studies of GIS and GPS Systems, Second Philadelphia Seminar on Information Technology-GIS and GPS Technologies and Applications, January 2005.
- Session Chair, Second Philadelphia Seminar on Information Technology-GIS and GPS Technologies and Applications, January 2005.
- Track Organizer, Special track on GIS, 2004 International Jordan Conference on Computer Science and Engineering, Al-Balqa' Applied University, Jordan, October 2004.
- Session Chair, "2004 International Jordan Conference on Computer Science and Engineering, A;-Balqa' Applied University, Jordan, October 2004.

- Session Chair, 2004 Summer Computer Simulation Conference, San Jose, California, USA, July 2004.
- Session Chair, 2003 Summer Computer Simulation Conference, Montreal, Canada, July 2003.
- Session Chair, 2002 Summer Computer Simulation Conference, San Diego, California, USA, July 2002.
- Session Chair, 2001 Summer Computer Simulation Conference, Orlando, Florida, USA, July 2001.
- Track Co-Chair, 2000 Summer Computer Simulation Conference, Vancouver, BC, Canada, July 2000.
- International Liaison, SPECTS'2k, SPECTS2001, SPECTS2002, and SPECTS2003 Conferences, The Society for Computer Simulation International.
- Co-Editor, Proceedings of the 1999 Summer Computer Simulation Conference, SCS, July 1999. ( 655 Pages.)
- Program Co-Chair, 1999 Summer Computer Simulation Conference, SCSC'99, The Society for Computer Simulation International, Chicago, July 1999.
- Track Co-Chair, Simulation in Engineering and Education, 1999 Summer Computer Simulation Conference, SCSC'99, The Society for Computer Simulation International, Chicago, IL, USA, July 1999.
- Track Chair: Simulation in Identification, Control, and Optimization, 1998 Summer Computer Simulation Conference, SCSC'98, The Society for Computer Simulation International, Reno, NV, USA, July 1998.
- Session Chair, 1998 Summer Computer Simulation Conference, The Society for Computer Simulation International, Reno, Nevada, July 1998.
- International Liaison, 1998 Summer Computer Simulation Conference.
- Session Chair, (System Simulation) 1995 IEEE ICECS'95 Conference.
- Program Committee Member, IEEE ICECS'95 Conference.
- Session Chair, (Simulation of Engineering Systems), 1992 International Pittsburgh Modeling and Simulation Conference.
- I have organized/co-organized the following exhibitions/workshops:
  - Department Scientific Day

- BAU Engineering Day
- BAU Workshop on Remote Sensing
- ASU Architecture Exhibition for 1999/2000
- Mud Construction
- Passive Solar Design
- Old and Famous Buildings in France
- Students Architecture Platform Contest
- City Planning Engineering
- I have supervised many B.S. Projects in Civil, Architectural, and Surveying and Geomatics Engineering

#### **ADMINISTRATIVE COMMITTEES:**

- Chairperson, Departmental Graduation Project Committee
- Chairperson, Faculty Cultural Committee
- Member of the University Scientific Research Committee
- Chairperson, Department of Surveying and Geomatics Engineering, Al-Salt, Jordan, Fall 2003-Fall 2005.
- Chairperson, Teaching Evaluation Committee, Department of Surveying and Geomatics Engineering, Al-Salt, Jordan, Fall 2002-Present.
- Member, College of Planning and Administration, Al-Balqa' Applied University, Al-Salt, Jordan, Fall 2000-Spring 2001.
- Chairperson, Department of Architectural Engineering, Applied Science University, Amman, Jordan, Fall 1998-Fall 2000.
- Member, College of Engineering, Applied Science University, Amman, Jordan.
- Chairperson, Cultural Committee, College of Engineering, Applied Science University, Amman, Jordan.
- Secretary of the Department Council, Dept. of Architectural Engineering, Applied Science University, Amman, Jordan, 1997-1999.
- Member, Budget Committee, Dept. of Architectural Engineering, Applied Science University, Amman, Jordan.
- Member, Discipline Committee, College of Engineering, Applied Science University, Amman, Jordan.



-Member, Industry Liaison Committee, Applied Science University, Amman, Jordan.

**RESEARCH AREAS:**

- Geographical Information Systems (GISs) and their Applications
- Global Navigation Satellite Systems (GNSSs) and their Applications
- Transportation Engineering and Planning
- Applications of Information Technology to Civil Engineering, Surveying Engineering, and Geomatics, Environmental Planning and Engineering and City Planning Engineering,
- Remote Sensing and Its Applications to Civil Engineering and City and Planning and Engineering
- Environmental Planning and Engineering
- System Recognition and Identification
- Applied Neural Networks
- Passive Solar Design
- Quantitative Analysis and Methods
- Feature Extraction and Recognition
- Energy Planning
- AutoCAD
- Modeling and Simulation Applications to Civil Engineering, City and Regional Planning, and Architectural Engineering.