

# Curriculum Vitae

## Personal Information:

**Name** : Shatha Sail AbuShanab  
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**Nationality** : Palestinian  
**Gender** : Female

## Education:

**1996-1997:** High school certificate (average Excellent), Al-Adaweia Secondary School, Tulkarm, West Bank.

**1997-2002:** BSc, Electrical Engineering (average Very Good), An-Najah National University, Nablus, West Bank, Palestine.

**2005-2010:** Master, Electronic and Computer Engineering (average Good), Alquds University, Abu Dies, West Bank, Palestine.

**Title- Master's thesis:** "*Augmented Reality Internet Laboratory*".

**2013-2018:** Doctor of Engineering, Electrical Engineering and Computer Science Department, the Faculty of Science and Technology (average Good), University of Siegen, Germany.

**Title dissertation:** "*Remote and On-Site Laboratory System for Low-Power Digital Circuit Design*", <https://nbn-resolving.org/urn:nbn:de:hbz:467-13459>

## Work Experience:

**2002-2003:** Researcher and teacher assistance, Electrical Engineering Department, An-Najah National University, Palestine. Teaching the laboratories: Digital Logic Design, Communication, Electrical and Electronics Circuit Laboratories.

**2003-2007:** Researcher and teacher assistance, Electronics Engineering Department, Al-Quds University, Palestine. Teaching the laboratories: introduction to computer, C++ Language, Electrical Circuit, Electronics Circuit, Network, and microprocessor laboratories.

**2009-2013:** Lecturer, Engineering and Technology Faculty, Palestinian Technical University Kadoori (PTUK), Tulkarm, West Bank, Palestine. Teaching the courses: Electrical Circuit, Control System, Digital Control System, Sensors and Transducers, Hardware Description Language (HDL), CPLD and FPGA Lab (ModelSim, QuartusII, Nios) Program using Altera devices, and computer programming (C++, java, Matlab, C#).

**2013-2018:** Member in Institute of Visual Computing (IVC) group under the supervision of Prof. Dr.-Ing. Marco Winzker. Research area: Remote Low-Power Digital Design laboratory that needs FPGA technologies, hardware description language (HDL), low-power digital design, and remote laboratory.

**2018-now:** Lecturer, Mechatronics Engineering Department, Palestinian Technical University Kadoori (PTUK), Tulkarm, West Bank, Palestine. Teaching the courses: Hardware Description Language (HDL), CPLD and FPGA Lab (ModelSim, QuartusII,) Program using Altera devices, Digital Control, Image Processing, Machine Learning and Data Acquisition.

#### **List of Publications:**

1. R. Hodrob, M. Obaid, , A. M. A. Mansour, A. Sawahreh, M. Nagnagheah, and **S. AbuShanab**, “*An IoT Based Healthcare using ECG*,” In IEEE 21st International Arab Conference on Information Technology (ACIT) , 2020, November).
2. **S. AbuShanab**, M. Winzker, R. Bruck, and A. Schwandt, “*A Study of integrating remote laboratory and on-site laboratory for low-power education*,” in IEEE Global Engineering Education Conference (EDUCON), 2018: 18-20 April 2018, Santa Cruz de Tenerife, Canary Islands, Spain.
3. **S. AbuShanab**, M. Winzker, and R. Bruck, “*Development and implementation of remote laboratory as an innovative tool for practicing Low-power digital design concepts and its impact on student learning*,” in 15th International Conference on Remote Engineering and Virtual Instrumentation (REV), 2018: 21-23 March 2018, University of Applied Sciences Duesseldorf, Germany.
4. M. Winzker, R. Kiessling, A. Schwandt, C. Sosa Paez, and **S. AbuShanab**, “*Teaching across the ocean with video lectures and remote-lab*,” in IEEE World Engineering Education Conference (EDUNINE), 2018: 11-14 March 2018, Buenos Aires, Argentina.
5. **S. AbuShanab**, M. Winzker, and R. Bruck, “*Remote low-power digital design system*,” in IEEE Jordan Conference on Applied Electrical Engineering and Computing

Technologies (AEECT), 2015: 3-5 November, 2015, Mövenpick Resort & Spa Dead Sea, the Dead Sea, Jordan, Amman, Jordan.

6. Schwandt, M. Winzker, and **S. AbuShanab**, “*Design of lab exercises for teaching energy-efficient digital design*,” in IEEE Global Engineering Education Conference (EDUCON), 2015: 18-20 March 2015, Tallinn University of Technology (TUT), Tallinn, Estonia, Tallinn, Estonia.
7. **S. AbuShanab**, M. Winzker, and R. Bruck, “*Teaching low-power design with an FPGA-based hands-on and remote lab*,” in IEEE Global Engineering Education Conference (EDUCON), 2015: 18-20 March 2015, Tallinn University of Technology (TUT), Tallinn, Estonia, Tallinn, Estonia.
8. S. Odeh, **S. AbuShanab**, and M. Anabtawi, “*Augmented reality internet labs versus its traditional and virtual equivalence*,” International Journal of Emerging Technologies in Learning (iJET), vol.10, no. 3, pp. 4-9, 2015.
9. S. Odeh, **S. AbuShanab**, M. Anabtawi, R. Hodrob, “*A Remote Engineering Lab based on Augmented Reality for Teaching Electronics*,” International Journal of Online Engineering (iJOE), vol. 9, no. S5, pp. 61-67, 2013.
10. **S. AbuShanab**, S. Odeh, R. Hodrob, and M. Anabtawi, “*Augmented Reality Internet Labs versus Hands-On and Virtual Labs: A Comparative Study*,” in IEEE Interactive Mobile and Computer Aided Learning International Conference (IMCL), pp. 17-21, 2012.
11. S. Odeh, **S. AbuShanab**, M. Anabtawi, and R. Hodrob, “*Remote Augmented Reality Engineering Labs*,” in IEEE Global Engineering Education Conference (EDUCON), pp.1-6, 2012.
12. S. Odeh and **S. AbuShanab**, “*Remote Experimentation Using Augmented Reality*,” Ubiquitous Computing and Communication Journal, vol. 4, no.1, pp.1994-4608, 2009.

### **Skills:**

- Aug 11-Sep 27, 2003: “CCNA (Cisco Certified)”, Amra centre, Nablus.
- April 11-14, 2010: “Signal Processing and Control with DSP”, Palestine Technical University (kadoori), Tulkarm.
- The Fall 2013 session:” The Future of Online Learning: Technologies, Tools, and Techniques”, Kaleidoscope Learning.