

Hani Jamleh (Ph.D.)

PERSONAL INFORMATION

- **Name:** Hani Ousamah Morad Jamleh
- **Date of Birth:** February 8, 1981
- **Nationality:** Jordanian
- **Family:** Married with three children
- **Address:** Dahyat Al Rasheed,
Amman 11942, Jordan
- **Telephone:** +962 (06) 535 5000 - 22848
- **E-mail:** hani.jamleh@gmail.com



RESEARCH INTERESTS

The main theme of my work is building Electronic Design Automation (EDA) tools based on optimization techniques for the applications of VLSI physical design, design for manufacturing, microlithography simulation, nanotechnology related problems, digital image processing, and computational photography. Automatic defects detection for TFT-LCD's screen, so called MURA, is one of my concerns in the field of display technology.

One of my areas of interest include the computation of depth from captured images by real aperture camera typically using passive depth from defocus techniques.

I have been very interested in hardware design and microcontroller programming for the applications of controlling, automation, computer vision, and biomedical device integration.

EDUCATION (Degrees)

- **Ph.D. in Electronics Engineering**, Graduate Institute of Electronics Engineering/Electrical Engineering Department, National Taiwan University, Taipei/Taiwan, *May/2014*.
 - **VLSI Electronic Design Automation (EDA)**
- **M.S. in Electrical Engineering**, Electrical Engineering Department, National Taiwan University, Taipei/Taiwan, *July/2007*.
 - **Integrated Circuit Systems (ICS)**
- **B.S. in Electronics Engineering**, Hijjawi Faculty for Engineering Technology Department, Yarmouk University, Irbid/Jordan, *February/2004*. GPA: 81.1/100 (Ranked 1st in graduating class)

GRADUATE COURSES TAKEN AT NATIONAL TAIWAN UNIVERSITY (NTU)

Power Electronics	Microlithography Theory and Practice
Computer Aided Analysis & Optimization of IC	VLSI Testing
Digital Communication Integrated Circuit Design	VLSI Physical Design
Multirate Signal Processing Filter Bank and Wavelet	VLSI Design Automation
Computer-Aided VLSI System Design	VLSI Design for Manufacturability
Advanced Computer Architecture	Physical Design for Nanometer ICs
Wide Gap Semiconductor Technologies	Digital Image Processing

WORK EXPERIENCE

- **Full Time Lecturer/Assistant Professor**, September, 2015-Now.
Engineering and Technology Faculty, Electrical Engineering Department, The University of Jordan (**JU**).
 - Teaches various courses such as Electronics I, Electronics II, Digital Electronics, Medical Electronics, Electrics Circuits Lab, Electronics Lab, and Electrical Engineering Lab.
 - Supervised Electronics laboratory.
 - Supervised more than five projects for undergraduate students, since 2015.
 - Supervised the development of the experiments of Electronics laboratory.
- **Part Time Lecturer**, Feb, 2019-Now.
Electrical Engineering Department, Al-Hussein Technical University (**HTU**).

- **Summer Intern**, July,2010-August,2010
Two months summer internship in Taiwan Semiconductor Manufacturing Company (**TSMC**), XinChu/Taiwan.

Subject: Designing source mask optimization (SMO) lithography simulator by Matlab using S-Litho in order to explore the effect of the method on N65 via resolution enhancement technique (RET) from 193 to 248 technology node, and on N45 Mx RET from immersion to dry lithography. Besides, helping assist-engineers to deal with logistic engineering tasks.

Department: Advanced Litho-Mask Engineering Program (ALMEP)/Manufacturing Technology Center (MTC).

■ **Teaching Assistant, Laboratory Engineer, and students' projects supervisor** Feb, 2004-Sep, 2005

Subject: 18-months, working for the department of Electronics Engineering, Yarmouk University, Irbid-Jordan.

Laboratories: Taught four laboratories, Electronics Eng. I, Electronics Eng. II, Digital Logic Design, and Microprocessor (Intel 8085).

■ **Training**, Aug. 2002 – Nov. 2002

Three months in *EETC "Egyptian Electronic Technology Company"*, Cairo/Egypt.

Subject: Electronic circuits design and advanced manufacturing with SMT "Surface Mount Technology".

■ **Training**, Nov. 2002 – Feb. 2003

Three months in *Imad Hanthal EST.*, Amman/Jordan.

Subject: PCB "Printed Circuit Board", design and manufacturing processes.

ACADEMIC EXPERIENCES

A member of key committees in the Electrical Engineering Department at University of Jordan.

- ABET committee.
- Student communication committee.
- Graduation project committee.
- Electrical Engineering curriculum committee.
- Electronics Engineering focus group.
- Electrical Engineering laboratory equipment tender committee.

Supervised many undergraduate students at University of Jordan.

➤ *Sample senior student projects:*

- ❖ Al-Thaby Al-Kaabneh, Dana Mufeed "IoT-Based Interacting Smart Water Level Monitoring System".
- ❖ Lena Abu Karaki, Manda Awad, and Nour Abdo "Epileptic Seizure Detection from EEG Signals Using Machine Learning Techniques".
- ❖ Omar Abedrabbo, Mohammad Yasser "3D Printer Design and Implementation".
- ❖ Basel Khamis, Nart Omet, and Amjad Mohaisen "Object Recognition (Machine Learning) Using Leap Motion Controller".
- ❖ Ahmad Ayman, Anas Atalla "Wireless Power Transfer for Electric Vehicles".
- ❖ Hussein Al-Akhrass, Bassam Hajjaj, and Akram Al-Kawamleh "PV System and Security".
- ❖ Rund Wadi, "Myo-Prosthetic Hand".
- ❖ Mohammad Ali, and Yaman Khtoom, "Tele-Heart Monitoring Device for Tachycardia Patients".
- ❖ Mona Hamdan, Zaid Hatamleh, and Ahmed Jueidi, "Computer-to-human Interface".

PROFESSIONAL SERVICES

Reviewed research papers for selected journals and conferences including:

- ❖ Jordan Journal of Electrical Engineering, Tafila Technical University, Jordan.
- ❖ Jordan Conf. on Applied Electrical Eng. and Computing Technologies (AEECT).
- ❖ IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT).

TAUGHT COURSES

#	CODE	NUMBER	INSTITUTION	COURSE TITLE
1	EE	0903261	JU*	Electronics I
2	EE	0903361	JU	Electronics II
3	EE	0933368	JU	Electronics Lab
4	EE	0933462	JU	Digital Electronics
5	EE	0933561	JU	Medical Electronics
6	EE	0903219	JU	Electric Circuits Lab
7	EE	0903204	JU	Electrical Engineering Lab
8	EE	0973598	JU	Graduation Project (1)
9	EE	0973599	JU	Graduation Project (2)
10	UNIT52	10101234	HTU***	Further Electrical, Electronics, and Digital Principles

* The University of Jordan, Amman, Jordan.

** American University of the Middle-East, Kuwait.

*** Al-Hussein Technical University, Amman, Jordan.

PROFESSIONAL MEMBERSHIPS

- Member of **IEEE** (Institute of Electrical & Electronic Engineers), Since 2002.
- Member of **JEA** (Jordan Engineers Association), Since 2004.

HONORDS & AWARDS

- Scholarships** from National Taiwan University for four years in order to complete my Ph.D. studies in Electronics Engineering, (2007-2012).
- Partially supported scholarship** for two-years from the Ministry of Economic Affairs and the Ministry of Education in Taiwan in order to finish my Master studies at National Taiwan University, (2005-2007).
- Certificate of Appreciation for Innovation** for the project “**Home Automation: Control, Security, and Power Saving**” funded by King Abdullah II Fund for Development, Jordan Engineers Association, June 2005.

COMPUTER SKILLS

- Programming Languages:** Matlab, NI Labview, C, C++, Visual Basic v.6.0, Assembly (Intel 8085, and Microchip MPASM), and FORTRAN.
- Electrical Eng. Programs:** Verilog, COMSOL, Silvaco, Synopsis tools, Mentor Graphics tools, ORCAD, NI Multisim, and Eagle PCB layout editor.
- Others:** AutoCad, and MS Office 2013.

PUBLICATION LIST

- [1] H. Jamleh, T. Y. Li, S. Z. Wang, C. W. Chen, C. C. Kuo, K. S. Wang, and C. C. P. Chen, "Automatic MURA Detection Based on Thresholding the Fused Normalized First and Second Derivatives in Four Directions," Soc. Inf. Display 18, 1058 (2010).
- [2] H. Jamleh, T. Y. Li, S. Z. Wang, C. W. Chen, C. C. Kuo, K. S. Wang, and C. C. P. Chen, "Mura-Detection Automation in LCD Panels by Thresholding Fused Normalized Gradient and Second Derivative Responses," SID Symposium Digest **50** 746 (2010).
- [3] Jamleh, H.; Chen, C.C.-P., "Hardware accelerated aerial image simulation by FPGA," Programmable Logic, 2009. SPL. 5th Southern Conference on, pp.39-44, 1-3 April (2009)
- [4] Yuan-Ting Wu, Pei-Chun Lin, Feng Seng Lin, Hani Ousamah Jamleh, Chia-Ping Shen, Shih-Ting Liu, Jin-Ming Wu, Charlie Chen Chung-Ping, Feipei Lai "Online Mobile ECG Measurement and Diagnosis with Cloud Computation", AMA-IEEE Medical Technology Conference (2011)
- [5] Feipei Lai, Pei-Chun Lin, Chia-Ping Shen, Jui-Hung Kao, Jin-Ming Wu, Shih-Ting Liu, Weizhi Zhou, Hani Ousamah Jamleh, and Charlie Chen Chung-Ping "Telecare with Integrated Health Portal & Smart phones", Medicine 2.0 (2012)
- [6] Ahmed Jamleh, Abdulmohsen Alfadley, Nasser Alghofaili, Hani Jamleh, and Khalid Alfouzan "Shaping Force and Torque Values during Canal Shaping using XP-Endo Shaper and ProTaper Next Systems" [Submitted]

LANGUAGES

- ▣ *Arabic*, (Native Tongue).
- ▣ *English*, Very Good in reading, listening, speaking, and writing.
- ▣ *Chinese (Mandarin)*, Elementary.

REFERENCES

- ▣ Upon Request...