

# Curriculum Vitae

**Name** WaleedDweik  
**Academic Rank** Assistant Professor  
**Address** Computer Engineering Department, Office: 412  
Faculty of Engineering and Technology  
The University of Jordan  
Amman 11942, Jordan  
E-mail: w.dweik@ju.edu.jo

## **Education**

- Ph.D.in Computer Engineering** **01/2009 to 12/2014**  
University of Southern California **Los Angeles, CA**
- GPA: 3.96
  - Thesis Title: Low Cost Fault Handling Mechanisms For Multicore And Many-Core Systems
  - Supervisor: Prof. MuraliAnnavaram
- Master of Science inComputer Engineering** **01/2007 to 12/2008**  
University of Southern California **Los Angeles, CA**
- GPA: 3.91
- BS in Computer Engineering** **10/2001 to 10/2005**  
University of Jordan **Amman, Jordan**
- GPA: 3.82 (Graduated ranking 3<sup>rd</sup> out of 93 students in the class of 2005)

## **Professional activities in the last five years**

- Assistant Professor** **01/2015 to Present**  
**University of Jordan** **Amman, Jordan**
- Instructing computer organization, digital logic, and embedded systems courses and labs.
- Intern** **01/2014 to 08/2014**  
**Intel Corporation** **Hillsboro, OR**
- Worked on the performance evaluation of the second-generation of Xeon Phi processor known as Knights Landing.

**Research Assistant**  
**University of Southern California**

**08/2008 to 12/2014**  
**Los Angeles, CA**

- Developed a simulation infrastructure to quantify the amount of available opportunistic testing proposed in our paper: Continuous Reliability Monitoring Using Adaptive Critical Path Testing.
- Developed a simulation infrastructure which models various types of intermittent faults and relies on accelerated fault injections to evaluate our proposed Reliability Aware Exceptions (RAEs) approach.
- Performed an FPGA-based microprocessor block utilization analysis to motivate our work: Signature-based Adaptive Periodic Testing.

**Lecturer**  
**University of Southern California**

**08/2013 to 12/2013**  
**Los Angeles, CA**

- Instructed the EE457 class: "Computer Systems Organizations". The class contents include: register transfer level machine organization, performance evaluation, arithmetic, pipelined processors, exceptions, out-of-order and speculative execution, cache, virtual memory, multi-core multi-threaded processors, cache coherence.

**Teaching Assistant**  
**University of Southern California**

**08/2008 to 05/2012**  
**Los Angeles, CA**

- Conducted discussion sessions and labs for Introduction to Digital Circuits, Computer Systems Organization, Computer Systems Architecture, and Digital System Design classes.

**Selected Published Research in the last five years**

1. B. Zandian, **W. Dweik**, S. Kang, T. Punihaole, and M. Annavaram. Continuous Reliability Monitoring Using Adaptive Critical Path Testing. *Dependable Systems and Networks (DSN)*, pages 151-160, 2010.
2. **W. Dweik**, M. Annavaram, and M. Dubois. Reliability Aware Exceptions. USC EE-Computer Engineering Technical Report, CENG 2011-2.
3. **W. Dweik** and M. Annavaram. Signature-based Online Periodic Fault Tolerance for Microprocessors (Fast Abstract). *Dependable Systems and Networks (DSN)*, 2012.
4. **W. Dweik**, M. Annavaram, and M. Dubois. Reliability Aware Exceptions: Tolerating Intermittent Faults in Microprocessor Array Structures. *Design, Automation and Test in Europe (DATE)*, 2014.
5. **W. Dweik**, M. AbdelMajeed, and M. Annavaram. Tolerating Hard Faults in GPGPUs. *Dependable GPU Computing workshop at Design, Automation and Test in Europe (DATE)*, 2014.
6. **W. Dweik** and M. Annavaram. SignTest: Signature-based Adaptive Periodic Testing. *The 39th Annual GOMACTech Conference*, 2014.
7. **W. Dweik**, M. AbdelMajeed, and M. Annavaram. Warped-Shield: Tolerating Hard Faults in GPGPUs. *Dependable Systems and Networks (DSN)*, pages 431-442, 2014.
8. M. AbdelMajeed, **W. Dweik**, H. Jeon, and M. Annavaram. Warped-RE: Low-Cost Error Detection and Correction in GPUs. *Dependable Systems and Networks (DSN)*, 2015.