## Basic Information :

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| **Name :** | Mohamed Hassan Elmahlawy |
| **Title :** | Professor |

Associate Professor of Electronics, Faculty of Engineering & Technology, Future University in Egypt
Design for testability of electronic circuits

## Education:

| Certificate | Major | University | Year |
|---|---|---|---|
| PhD | Electrical Engineering - Electronics | University of Kent- Faculty Of Engineering - Canterbury - United Kingdom | 2002 |
| Masters | Electrical Engineering | Military Technical College | 1995 |
| Bachelor | Electrical Engineering | Military Technical College | 1989 |

## Teaching Experience:

| Name Of Organization | Position | From Date | To Date |
|---|---|---|---|
| FUE | Professor | 04/09/2016 | Current |

## Researches / Publications :

- Analog testing with non-sinusoidal waveforms in the single mode: a new parametric fault detection approach
- Normalized signature graph of analog circuits for fault classification using digital testing
- New Board-Level Interconnect Fault Diagnosis Approach in Industrial Applications
- Hybrid Segmentation Approach for Digital Circuits in Pseudo-Exhaustive Testing
- Digital Testing for Parametric Fault Detection in Analog Circuits Using Classified Frequency-Bands and Efficient Test-Point
- Brain Tumor Image Segmentation Based on Deep Residual Networks (ResNets)
- New Digital Testing of Analogue Circuits Based on Frequency Band Classification
- Remote Fault Diagnosis for Testing Digital Circuits through Internet of Things in Industrial Applications
- Remote Fault Diagnosis for Testing Digital Circuits through Internet of Things in Industrial Applications
- New Hybrid-Based Self-Test Strategy for Faulty Modules of Complex Microcontroller Systems
- Efficient Microcontroller System to Test an SRAM Chip Using Signature Analysis
- Test Pattern Generator Optimization for Digital Testing of Analogue Circuits
- Efficient Computerized-Tomography Reconstruction Using Low-Cost FPGA-DSP Chip
- Digital Signature Based Test of Analogue Circuits Using Amplitude Modulated Multi-Tone Signals
- Two-Test Pattern Capabilities of the LFSR/SR Generator in Pseudo-Exhaustive Testing based on Coding Theory Principles
- New Algorithm to Segment Combinational Circuits in Pseudo-Exhaustive Testing
- Signature-Based Self-Test Approach for Single-Shot Circuits on the Circuit Board Level
- New Testability Analysis and Multi-Frequency Test Set Compaction Method for Analogue Circuits
- New Test Pattern Generators for the BIST Pseudo-Exhaustive Testing based on Coding Theory Principles
- FPGA-Based Implementation of the Digital Testing of Analogue Circuits

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| Signature Multi-Mode Hardware-Based Self-Test Architecture for Digital Integrated Circuits |
| Design and Development of a Low Cost Prosthetic Arm Control System Based On sEMG Signal |
| Low-Power Low-Noise CTIA Readout Integrated Circuit Design for Thermal Imaging Applications |
| Monitoring of Upper-Limb EMG Signal Activities Using a Low Cost System: Towards a Power-Assist Robotic Arm |
| Monitoring of Upper-Limb EMG Signal Activities Using a Low Cost System; Towards a Power-Assist Robotic Arm |
| New Digital Testing of Analogue Circuits |
| Parametric Fault Detection of Analogue Circuits |
| Hybrid based Self-Test Solution for Embedded System on Chip |
| Normalized signature graph of analog circuits for fault classification using digital testing |
| Analog testing with non-sinusoidal waveforms in the single mode: a new parametric fault detection approach |
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