



**Basic Information :**

**Name :** Mohamed Hassan Elmahlawy  
**Title :** Associate 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

**Research :**

- 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
- Parametric Fault Detection of Analogue Circuits Based on Optimized Support Vector Machine Classifier
- 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
- 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