

# Curriculum Vitae

## Personal Details

**Title** : Dr.  
**Name** : Mohammed Safy Moussa Elwan  
**Nationality** : Egyptian  
**Email** : Msafy\_2010@yahoo.com  
**Position** : A Lecturer in The Department of Electronic Engineering,  
EAEAT , Cairo, Egypt

## Academic Qualifications

- **PhD.** In Electrical Engineering, University of Xian, **China 2014.**  
**PhD. Title** :“ *High Resolution Digital Terrain – Elevation Data For Intelligence Gathering and Tactical Target*”
- **MSc.** In Electrical Engineering, Military Technical College, Cairo, Egypt, **2008.**  
**MSc. Title** :“ *Micromachined bolometer for thermal imaging*”
- **BSc.** In Electrical-Communication Engineering, Military Technical College, Cairo, Egypt, June 2001.

## Professional Experience

- February 2017 –Now** A Lecturer in The Department of Electronic Engineering, Egyptian Academy For Engineering And Advanced Technology , Cairo, Egypt
- October 2014 –November 2017:** A Lecturer in The Department of Electronic Engineering, Military Technical College, Cairo, Egypt
- October 2011 – October 2014:** A PhD student and an assistant Lecturer in the Department of Electrical & Electronic Engineering, University of Xian, China.
- June 2008 – October 2011:** An Assistant Lecturer in The Department of Electronic Engineering, Military Technical College, Cairo, Egypt
- October 2003 - June 2008:** An Instructor in The Department of Electronic Engineering, Military Technical College, Cairo, Egypt.
- July 2001 – September 2003:** A Communication Engineer in the Egyptian Army.

## Areas of Expertise:

- **Major Area:**
- Image processing .
- **Minor Areas:**
  - ◆ Interferometric synthetic aperture radar.

## Fields of Current Research Interest

- ◆ Image processing (estimation/detection) with keen interest in various practical applications.
- ◆ Algorithm development for air- and spaceborne SAR interferometry, interferometric performance estimation.
- ◆ Optimization methods in synthetic aperture radar image registration.
- ◆ Design and implementation of low cost synthetic aperture radar.

## **Academic / Teaching Experience:**

### **I- Undergraduate Teaching Courses:**

#### **1. Electrical Circuits Track Track:**

- Integrated Circuits Technology.
- Circuit Theory (part I, basic course).
- Electronic Circuits(part I, basic course).
- Solid State Devices.
- Circuit Theory (part II, advanced course).
- Electronic Circuits (part II, advanced course).

#### **2. Electrical measurements Track:**

Electrical measurements (part I, basic course).

### **II- Postgraduate Teaching Courses:**

#### **1. Synthetic aperture radar Track:**

- Synthetic aperture radar I
- Synthetic aperture radar II.

#### **2. Electrical Circuits Track:**

High speed devices

### **III- Post Graduate Thesis Supervision:**

- Design of SAR waveform.
- Resolution merges for satellite images taken from different sensors (in progress).
- .High resolution DEM for SAR images(in progress).

### **IV- Mathematical Tools:**

- Advanced Calculus and Differential Equations
- Probability and Numerical Techniques
- Complex Numbers and matrices.

### **V- Engineering Software Capabilities:**

- *Matlab*: For programming circuit/Image processing/ communication applications.

## **Attended Conferences**

1. International Conference on Control, Automation and Diagnosis (ICCAD), Hammamet-Tunisia, January 19-21, 2017
2. The 2<sup>nd</sup> international conference on advanced intelligent systems and informatic (AISIP'16), Cairo University, Egypt, 24-26 October 2016.
3. IEEE 3-International conference of computer and network technology, Dalian,china ,October (2013).
4. 15<sup>th</sup> Int. conference on aerospace & aviation technology, Military Technical, college, Cairo, Egypt, 28-30 May 2013.
5. IET International Radar Conference 2013 , Xian,china , April (2013).
6. 14<sup>th</sup> Int. conference on aerospace & aviation technology, Military Technical, college, Cairo, Egypt, 24-26 May 2011.
7. 5th international IEEE Microsystems packaging assembly and circuit's technology (IMPACT), Taipei, 20-22 Oct 2010.
8. 7<sup>th</sup> Int. conference on electrical engineering ICEENG-7, Military Technical College, Cairo, Egypt, May 25-27, 2010.
9. 7th International Conference on Electrical Engineering WSEAS, Istanbul Technical University, Turkey, 29-31 May 2008.
10. 5<sup>th</sup> Int. conference on electrical engineering ICEENG-5, Military Technical College, Cairo, Egypt, May 25-27, 2006.

## **List of publications:**

### **I- Conferences publications**

1. Ibrahim Douidar, Mohammed Safy and A. S. Amein “Parametric evaluation of PRF availability for a space borne SAR”, International Conference on Control, Automation and Diagnosis (ICCAD), Hammamet-Tunisia, January 19-21, 2017
2. Safy Mohammed, Guangming Shi, and A. S. Amein. “Improved Harris corner detector algorithm for image co-registration”, IEEE 3-International conference of computer and network technology, Dalian,china ,October (2013).
3. Safy Mohammed, Guangming Shi, Li Zhengfeng and A. S. Amein. “ High Resolution Digital Terrain Elevation Processing,” 15<sup>th</sup> Int. conference on aerospace & aviation technology, ASAT – 15, Cairo, Egypt ,May ,(2013).
4. Safy Mohammed, Guangming Shi, and A. S. Amein. “Semi-automatic image registration using harris corner detection and random sample consensus(RANSAC) ,” IET International Radar Conference 2013 , Xian,china ,April (2013):0579-0579.
5. Safy Mohammed , Ahmed Hafez, Yasser El Shaer “Design of a high fill factor micromachined bolometer for thermal imaging applications,”, 5th international IEEE microsystem packaging assembly and circuits technology (IMPACT),20-22 Oct 2010 Taipei.
6. Safy Mohammed , Ahmed Hafez “Stress analysis of micromachined bolometer for thermal imaging applications,” 7th International Conference on Electrical Engineering WSEAS, 29-31 May 2008Istanbul Technical University, Turkey.
7. Safy Mohammed , Ahmed Hafez “Thermal modeling of micromachined bolometer for thermal imaging applications,” 5th International Conference on Electrical Engineering ICEENG, 25-27 May 2006.