

# ADHAM AHMED ABBAS ELMAHALLAWY



## Contact

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## Languages

English –  
Proficient Arabic  
– Native

## Hobbies

- Reading
- Writing
- Computing
- Travelling
- Photograph

## Summary

More than twenty (30) years of successful work experience in an education environment of military/civil, including Teaching air defense, Information security and Structured programming basics, & Engineering courses.

Very experienced in Teaching, Tutoring and Coaching Cadets.

Skills: Ability of Personnel Management (Leadership), rigor, reactivity, adaptability, ability to problem-solving, flexibility, organizational skills to meet deadlines, initiative, analysis, pedagogy, and tutoring.

## Skill Highlights

- Communication
- Teamwork
- Diplomacy
- Research
- Innovative
- Motivating

## Experience

- 2019- Till now **Lecturer**- Higher Institute of Engineering and Technology -King Marriott Alexandria
- 2010-2018 **Lecturer** – Air Defense College – Egypt
- 2001-2010 **Assistant Lecturer** – Air Defense College - Egypt
- 1995-2001 **Teaching Assistant** - Air Defense College – Egypt.

## Courses,

Mathematics, Calculus, Physics, Signal and Systems, Automatic control, Electric measurements and Technical Writing, Digital control, Communication, Satellite

## HIGHLIGHTS OF QUALIFICATIONS

- PhD: in **Electrical Engineering**, University of Alexandria, Egypt, Oct., 2010. "Robust Flight Control System Design Using  $H^\infty$  Loop-Shaping and Recessive Trait Crossover Genetic Algorithm".
- MSc: in **Electrical Engineering**, University of Alexandria, Egypt, Dec., 2001. "Critical control system using method of inequities".
- BSc: in **Electrical Engineering** University of Alexandria, Egypt, May 1994. With "Excellent degree". The Final Project "Programming of microprocessor 8080".



## **HIGHLIGHTS OF MILITARY QUALIFICATIONS**

- Master degree in Air defense from Greece.
- Master degree in Military Science's from Egypt.
- Fellowship of Nasser Military academy (high war college).
- Crisis Management & Negotiation ( Nasser Military academy)
- Decision Making & Support

## **Conferences and Scientific Forums**

- 6<sup>th</sup> International Conference on Electrical Engineering ICEENG-6, Military Technical College, Cairo, Egypt 2008.
- International Conference on Control, Automation and Systems, COEX, Seoul, Korea 2008.
- 7<sup>th</sup> International Conference on Electrical Engineering ICEENG-7, Military Technical College, Cairo, Egypt 2010.
- International Telecommunications Conference (ITC-Egypt) 2024

## **Training and Workshops**

- Strategic and national security course.
- Crisis management and Negotiation course.
- Preparing for diplomatic work.
- Courses in Teaching skills (as attached)

## **Courses and training outside country**

- OBC in USA.
- Master degree in Air defense from Greece.
- Training visits to Saudi Arabia & UAE.

## **PUBLICATIONS**

### **Conferences papers:**

- ElMahallawy, A. A. et al (2008). "Design of a Robust Controller for Antenna Tracking System Using Recessive Trait Crossover Genetic Algorithm", 6th International Conference on Electrical Engineering ICEENG-6 , Military Technical College, Cairo, Egypt.
- ElMahallawy, A. A. et al (2008). "Recessive Trait Crossover Genetic Algorithm Flight Control System Design ", International Conference on Control, Automation and Systems, COEX, Seoul, Korea.
- ElMahallawy, A. A. et al (2010). "Robust Flight Control System Design Using  $H_{\infty}$  Loop-Shaping and Recessive Trait Crossover Genetic Algorithm" , 7th International Conference on Electrical Engineering ICEENG-7, Military Technical College, Cairo , Egypt.



- ElMahallawy, A. A. et al (2024) IEEE."An\_Optimized\_Implementation\_of\_the\_Blowfish\_Encryption\_Algorithm" 2024 International
- ElMahallawy, A. A. et al (2024) IEEE."Optimized\_Metamaterial\_Sensor\_for\_Effective\_Bone\_Fracture\_Detection" 2024 International Telecommunications Conference (ITC-Egypt)

## JOURNALS

- ElMahallawy, A. A. et al (2010). "Robust Flight Control System Design Using  $H_{\infty}$  Loop-Shaping and Recessive Trait Crossover Genetic Algorithm", Expert Systems With applications (ESWA) journal.
- ElMahallawy, A. A. et al (2023). " De-Noising of Secured Stego-Images Using AES for Various Noise Types", RZEGŁAD ELEKTROTECHNICZNY, ISSN 0033-2097, R. 99 NR 2/2023
- ElMahallawy, A. A. et al (2023). An improved indoor positioning based on crowd-sensing data fusion and particle filter. Elsevier, Physical Communication Journal.
- ElMahallawy, A. A. et al (2024). An Experimental Analysis of Outdoor UAV Localisation Through Diverse Estimators and Crowd-Sensed Data Fusion. Elsevier, Physical Communication Journal
- ElMahallawy, A. A. et al (2025). Robustness of Cloud Security against Brute-force Attack. Egyptian Chinese University, Advanced Sciences and Technology Journal (ASTJ)
- ElMahallawy, A. A. et al (2025). Deep Transfer Learning Based on Hybrid Swin Transformers With LSTM for Intrusion Detection Systems in IoT Environment. The Institute of Electrical and Electronics Engineers (IEEE), *IEEE Open Journal of the Communications Society*.
- ElMahallawy, A. A. et al (2025). Unlocking the Dynamic Potential: Next-Gen DOA Estimation for Moving Signals via BSCS with Adaptive Weighted Kalman Filter in 6G Networks. Elsevier, (IOT) Journal Internet of Things; Engineering Cyber Physical Human Systems Journal

