

# Mohamed Moawed Ibrahim Dessouky

Research & Teaching Assistant,  
Computer Science & Engineering Dept.,  
Faculty of Electronic Engineering,  
Minoufiya University.



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<b>Personal Information</b>	<b>Full Name</b>	<b>: Mohamed Moawed Ibrahim Dessouky</b>
	<b>Date of Birth</b>	<b>: 27/4/1984</b>
	<b>Place of Birth</b>	: Menouf – El-Minoufiya – Egypt.
	<b>Marital Status</b>	: Married + 1 daughter.
	<b>Residence Address</b>	: Faculty of Electronic Engineering Menouf– Minoufiya – Egypt.
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## Profile

- A highly **talented, energetic, and enthusiastic** researcher with proven experience in networks security.
  - **More than six years of teaching experience** as an **assistant lecturer, and Teaching Assistant** for a variety of undergraduate courses in different fields.
  - Deep interest and joy in working with university students.
  - Excellent **leadership** abilities, able to develop and implement innovative research ideas.
  - Effective communicator with excellent planning, organizational, and negotiation strengths as well as the ability to lead, reach consensus, establish goals, and attain results.
  - In-depth ability to monitor/Assess performance of self, other individuals, or organizations to make improvements or take corrective action.
  - Able to **budget and manage** large scale projects.
  - Able to quickly and independently learn and master new technology and skills.
  - Self-motivated and able to perform effectively in pressured environments and situations.
  - Familiar with Windows, Linux, and UNIX operating systems.
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## Academic Work Experience

- **Teaching Assistant and Assistant Lecturer** , Department of Computer Science and Engineering. Faculty of Electronic Engineering, Menoufia University, Egypt. **Apr. 2011**
- **Demonstrator** , Department of Computer Science and Engineering. Faculty of Electronic Engineering, Menoufia University, Egypt. **2007 - 2011**
- *Research, study master courses, and builds the topic survey.*

- Teaching assistant for the following undergraduate Courses:
    1. Logic Design
    2. Computer Languages
    3. Data Structure and Algorithms
    4. Computer Organization
    5. Computer Architecture
    6. Computer Networks
    7. Artificial Intelligence
    8. Computer Graphics
    9. Computer Security.
    10. Operating Systems.
    11. Image Processing
    12. Distributed Systems
  - Working as a consultant for several 4<sup>th</sup> year projects.
  - **Duties:** Conducting research, tutoring, lab instructor, marking, project assistance, and consultation with students.
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## Research Interest

- My research is on computer science and engineering fields and all new technologies and new researches in different fields on computer science. I interest with computer network and security field and my thesis was in that field. And I'm planning to expand my research in another fields like Artificial Intelligence, image processing and computer vision
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## Computer Proficiency

- **Operating Systems:** Windows system (95, 98, Me, XP, NT, 2000, Vista), UNIX and Linux.
  - **Programming:** Matlab, C/C++, Java, Assembly, OpenCV, Opengl, VS.NET, VHDL.
  - **Web site Design and Development:** Photoshop, Flash, PHP, HTML, ASP.NET.
  - **Applications:** Network sniffer (Wireshark), Windows MS Office, LabVIEW.
  - **Certifications:** CCNA, IC DL, TOEFL.
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## Education

### *PhD Degree*

- I finished the preparation courses of the PhD in Computer Science and Engineering Dep. at Faculty of Electronic Engineering in the field of "Artificial Intelligent and Image Processing".
- The courses are: Operation Research, English Languish, Watermarking and Data Hiding, Digital Signature, Image Processing, Cloud Computing, Wireless Sensor Networks, and Bioinformatics.
- I passed at all of them with a grade **Excellent (88.5%)**

## **Master Degree**

**M.Sc. in Electronic Engineering, Major: Computer Science and Engineering.  
Menoufiya University Faculty of Electronic Engineering, Egypt 2011**

**Thesis title:** " A Unified Methodology for Preventing Layer 2 Attacks in Campus or LAN Networks", supervised by Prof. Nawal A. Elfishawy, and Prof. Wael S. Elkilani

- proposed a detection and prevention ARP attack system for ARP spoofing attacks. The system consists of a software portion and another hardware one. Both portions are connected to a hub.
- The system is connected to ethernet through one of its ports. The software portion allows authentication of users to a centralized server. The server, in turn, retrieves logged users to the switch. Hence filtering of untrusted users is performed by telnetting the main switch. The hardware portion is implemented through an embedded board and represents a backup to the centralized server.

**One year postgraduate theoretical study in Computer Science and Engineering.  
Faculty of Electronic Engineering, Minoufiya University.**

### **Master preparation courses are:**

- Data Communication
- Artificial Intelligence and Visualization
- Information Security
- Advanced Digital Systems
- Neural Networks
- Advanced Topics in Probabilistic Techniques
- English Language Writing Skills
- Multimedia

## **Bachelor Degree**

**B.Sc. in Electronic Engineering, Major: Computer Science and Engineering,  
Menoufiya University Faculty of Electronic Engineering, Egypt. 2006.**

**Relevant Courses** Logic Design, Computer Languages, Data Structure and Algorithms, Computer Organization, Computer Architecture, Computer Networks, Artificial Intelligence, Computer Graphics, Computer Security, Operating Systems, Image Processing, Distributed Systems

- **Ranked the First** over the Department of Computer Science and Engineering which contains over 100 students, with **degree 91.2%, Excellence with Honors**
- Designed and implements the VPN network application as a part of my graduation project for which I received "Distinction" grade.

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## **Publications, Presentations and Abstracts**

- **M.M.Dessouky, W.El-kilani, and N.El-fishawy, "A Hardware Approach for detecting the ARP Attack"** was published in *Menoufiya Journal of Electronic Engineering Research*, volume 20-No.1 January 2010.
- Also, it was published in *INFOS 2010, the 7th International conference on information and systems 28-30 March 2010, faculty of computers and information, Cairo University.*

## Thesis Abstract

My precious work was on the network security and specially saving ARP protocol against attacks.

The ARP poisoning attack has gained an intensive care of the researchers due to its danger. Previous work suggested many solutions to the ARP attack but it can be noticed that several of these solutions constitute a single point of failure. Others depend on cryptographic techniques that reduce significantly the addresses solution performance making their adaption impractical. A set of them needs a minor or major modification of the ARP protocol. This prevents backward compatibility.

My thesis proposed a **detection and prevention ARP attack system** for ARP spoofing attacks. The system consists of a software portion and another hardware one. Both portions are connected to a hub. The system is connected to ethernet through one of its ports. The software portion allows authentication of users to a centralized server. The server, in turn, retrieves logged users to the switch. Hence filtering of untrusted users is performed by telneting the main switch. The hardware portion is implemented through an embedded board and represents a backup to the centralized server.

In the future I think in completing my work of securing the network against all different layer 2 attacks. Also I'm planning to make some deep research on Artificial intelligence field and other new research like Cloud Computing or DNA computing.

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## Additional Information

### 1. Languages

Arabic : Mother tongue

English : Fluent spoken, Read & Written

### 2. Hobbies and Skills

- Arabic calligraphy
- Good Communication Skills
- Work under pressure and patient
- Hard worker and appreciate team work spirit
- Organized thinking, dedication, and loyalty.
- Writing articles and poetry

### 3. References

#### **a- Prof. Nawal El-Fishawy**

Head of the department of Computer Science & Engineering - Faculty of Electronic Engineering - Minoufiya University - Egypt. (Email: nelfishawy@hotmail.com).

#### **b- Dr. Gamal Mahrouce**

Lecturer at the department of computer science and engineering - Faculty of Electronic and Engineering - Minoufiya University - Egypt. (Email: gamal\_mahrouce@yahoo.com).

#### **c- Dr. Wael S. Elkilani**

Head of the department of IT - Faculty of Computers and Informations- Minoufiya University - Egypt. (Email: welkilani@gawab.com).