Mariam Galal

Mariam.Galal@gmail.com |

Experience

September 2011 - current | Teaching Assistant at Electronics and Communications Department – Arab Academy of Science and Technology – Alexandria, Egypt
including helping with courses preparation and teaching and helping with managerial tasks

August 2010 | Training at Telecom Egypt
in Miami Exchange, Gleem Exchange and Transmission building

August 2009 | Training at AAST Simulators Complex
In the department of Electronics and Communications

June - September 2008 | Training at Vodafone
At the Networks Operations and Maintenance department and the switch.

Volunteering

September 2010 to now | Elected Chairman of the IEEE AAST Student Branch
Leading a team of 40 student volunteers in organizing events, conferences and sessions for the local community. Led the organization of many national and international events such as the "First Lego League". During my leadership of the team, our student branch won the competition to organize the semiannual SBC "Student Branch Congress", which is the biggest international event of the IEEE worldwide.

September 2007 to September 2010 | Secretary and Vice Chairman of IEEE AAST SB
Representing it nationally and internationally, paper work, sponsorship packages, marketing campaigns, organizing events, helped with the website design, volunteers' recruitment and headed the membership development committee.

January 2008 to 2010 | Member of the Seeru RND team
Preparing courses and materials for a long term non-profit human development program for developing tomorrow's Egyptian leaders.

2004 – 2006 | Magazine Reporter and Editor
For the School Magazine "Borro News"

Education

September 2013 | MSc Electronics and Communications Engineering – AAST Alexandria
- Total Grade: Excellent: GPA: 4.0
- Thesis Title: Mobile Transactions Employing Embedded Smartphone Flashlight to Replace ATM Cards

July 2011 | **BSc Electronics and Communications Engineering – AAST Alexandria**
- Total Grade: Excellent: GPA: 4.0 – Best of my school year
- Graduation Project: Advanced Design of ECG for Biomedical Applications – Graduation project grade: Excellent (A+)

June 2006 | **German School "Deutsche Schule der Borromäerinnen" – Alexandria**
- Graduated with the German Abitur Certificate
- Grade: Excellent: 1.3 (German Scale from 1.0 (Best) to 6.0 (worst))

Publications

June 2013 | **Smartphones for Payments and Withdrawals Utilizing Embedded LED Flashlight for High Speed Data Transmission**
Published in: Fifth International Conference on Computational Intelligence, Communication Systems and Networks (CICSYN2013) in Madrid, Spain

December 2013 | **High Speed Data Transmission over a Visible Light Link Employing Smartphones Xenon Flashlight as a Replacement of Magnetic Cards**
Published in: High Capacity Optical Networks & Emerging / Enabling Technologies (HONET – ICT) in Magosa, Cyprus

February 2014 | **Employing Smartphones Xenon Flashlight for Mobile Payment**
Published in: 11th International conference on Systems, Signals & Devices (SSD) in Barcelona, Spain

Achievements

June 2012 | **Attending the Annual Google I/O conference in San Francisco, California, USA,** with over 6000 professional developers and representatives from giant technology companies. The conference provided a series of keynotes, sessions and workshops for developers, professionals and academia in the field of Engineering and Technology.

August 2010 | **Attending the Bi-annual IEEE Student Congress in Leuven Belgium,** with students and professionals from 40 different countries, exchanging experience and knowledge about leadership, team work and being an active student and IEEE volunteer.

July to August 2009 | **Course in 'Software Development' and Course in 'Electronics in Navigation'** in Germany, Hessen (took part in the program of the "Deutsche Sommerakademie")

May 2007 | **Robotics Competition Roboadventure**
Working with a team and winning the first prize.

2003 to 2006 | Winning of the **1st prize** of the **International mathematics competition** "Kangaroo of mathematics" **4 times in a row**

2003 | Winning of the **1st prize** of the German math competition "Rheinland-Pfalz"
Awarded a 5-day scholarship for a math course in Germany – Kaiserslautern

Scholarships

September 2007 to February 2011 | **Full Scholarship for studying at the AAST**
Renewed every semester as a reward for academic excellence and being best of my academic class.

June 2006 | **Awarded a Full-Scholarship**
For living and studying in Germany during college years (for 5 years)
Fully sponsored by the DAAD (German Academic Exchange Service)

28th July – 13th August 2005 | **Scholarship by the German Ministry of Education**
For attending a course about statistics and medicine in Germany "Deutsche Schülerakademie"
Grovesmühle

Skills

Language skills:
- Arabic (native)
- English (excellent)
- German (excellent)
- French (very good)

Soft skills:
- Communication skills and body language use
- Negotiation skills
- Leadership skills
- Presentation skills
- Ability to teach and train a wide range of students
- Ability to deal with a wide variety of people with different personalities and from different cultures

Computer / Technical skills:
- C Programming
- Matlab
- Basics of IC design and VLSI
- Professional use of Autocad, Corel Draw, Microsoft Office Package
- MS project
- Design and Production of PCBs using PCB Express
- Microcontrollers Programming using AVR MC
- Robotics and Building special purpose robots
- Basics of Java Programming
- C# object oriented programming
- Microsoft SQL Query
- Basics of Networks
- Basics of cellular (mobile) networks
- Basics of wireless networks
- Computer knowledge and 10-finger fast typing