Ghada Abd El-Rahman Sokar
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Work:

10/2014 – present	**Teacher assistant in Computer Engineering Department,** Cairo University
Courses:	Computer Architecture, Microprocessor, Logic Design, Software Engineering and Pattern Recognition.

Education:

10/2014 - present	**Master in Computer Engineering**
09/2009 - 07/2014	B.Sc. in Computer Engineering
	Faculty of Engineering, Cairo University.
Grade:	Distinction with Honors (**92.03**%), **1st of the class**
Graduation project:	**Brain Gates (Distinction)**
	A PC game that is based on Neurofeedback concept to increase concentration and control the game with and only with brain signals.
Fields:	BCI, Gaming, and Machine Learning
Sponsor:	Microsoft ATLC
Achievements of Brain Gates:	• **2nd place** in Citizenship track in Imagine Cup 2014 National Finals.
	• **1st place** in IBTIECAR2014 competition track multimedia understanding represented Computer Engineering department in the gallery of the best graduation projects in of the faculty.
	• Winner in the Young Innovators' Awards Program Shaghal competition

Trainings Experiences:

2013	**In Berlin, Germany at BAM [Certificate is attached].**
	Working in two projects: first, development of meshing tools and visualization for finite element software using Gmsh and Netgen tools. Second, development of an interface for matrix representation in python (Numpy) and C++ (Eigen).
2013	**Microsoft AppFactory Program**
	Development of Window 8 and window phone applications
2012	**Technology innovation and Entrepreneurship center-Cairo**
	Web Development.
2012	**Cairo University**

Other Projects

VHDL language and Web development.

04/2014	• Compiler for language similar to Java but simpler.
	• Arduino project, System controls car, 4 sensors, screen, and buttons.
12/2013	• 2 players Game using **Java**. Game has machine intelligent part enables player to play with computer.
	• A digit classifier that takes an input image of a single handwritten digit and determines what the digit is.
07/2013	• Fetch Search Engine using **Java**
	• MP3 Player (**VHDL** and **Java**)
04/2013	• **VHDL** Micro-programmed pipelined RISC Processor
12/2012	• **VHDL** Micro-programmed Harvard CISC 32-bit Processor with two level memory caches.
	• Website for Vehicle and Driver Scheduling for public transport using **Java** (**2nd of the class**)

	- **C++ based** O.S on Linux platform.
	- **Matlab** implementation of image Processing using Canny, Hough transform, Harris corner algorithms and SIFT-Based Object Recognition
	- File(s) de/Compressor Software using **C++/C#**
06/2012	
	- **Help Me!!** is **Android** Mobile Application, which is connected to Fingertip Pulse Oximeter medical device via Bluetooth, helps people who have heart disease or in hard situation.
04/2012	- Security and automatic gate using **C#** controlling DC motor, Sensor, and keypad via parallel communication (**1st of the class**)
	- School website for El Sarh school using **ASP.net**
12/2011	- 3D human animation game based on **C# (XNA)**
	- Automatic correction of Exam via **serial communication** between student PC and the correction server using **assembly**
	- Database system of Car Agency using **C#** and **SQL**
11/2011	- Logic simulator using Graphics library (**CMU Graphics**) and Object Oriented design (**2nd of the class**)
	- Stopwatch – **ICs integration** on a breadboard
	- Simple Handwritten Digit Recognition using **C++**
10/2010	- Arithmetic logic unit (ALU) based on **Verilog HDL**

Technical skills:

Programming Languages & Technologies	C++, C#, Assembly, Window 8 XMAL
	ASP.net, Java, PHP, HTML, SQL
	VHDL , Verilog, Python
Tools	Visual Studio, Net Beans, Matlab ,Unity Engine, Altera package (modelsim), Maxplus
	Adobe Photoshop, 3D max, Synopsys Design Compiler
Platforms	Windows, Linux, Android.
Database Management Systems	Microsoft SQL Server (2008, 2005)
	DBMS Tools

Extracurricular activities:

- Participant in Imagine Cup Competition with my graduation project and hold the **2nd place** in national finals in citizenship Category.
- Math instructor in Resala Association.
- Participant in **IEEExtreme 5.0** and **6.0**

Conceptual knowledge

Object Orientation Concepts
Software analysis, Modeling and Designing

Languages:

Arabic: Native language
English: Very good

Interests:

Design photos using Photoshop software, Learning about human development science, and Basketball.

Additional information:

Nationality: Egyptian
Birth Date: January, 7, 1993