PERSONAL INFORMATION	Essmat S. Zaghloul

📍 8342 Al-Hadaba Al-Aulia, Mokattam, 11571 Cairo (Egypt)

📱 (+2) 01006521055

✉ e.s.zaghloul@gmail.com

WORK EXPERIENCE

25 Jun 2006–Present

Associate Researcher

The National Research Center, Giza (Egypt)

- Currently pursue my PhD studies under the supervision of the Aerospace Structures Chair, Delft University, The Netherlands in collaboration with the mechanical engineering Department of the National Research Center, Egypt.

- Work on designing and building mathematical simulation for wind turbine related projects.

1 Sep 2000–1 Sep 2004

Teaching Instructor

Institute of Aviation Engineering and Technology, Giza (Egypt)

Worked for the Aerospace Department, full time lectures in the fields:

- Mechanics
- Engineering Drawing
- Machine Design
- Structural Analysis
- Composite Materials
- Finite Element Analysis
- Control Systems Analysis and Design
- MATLAB Programming

EDUCATION AND TRAINING

1 Jan 2005–Present

PhD. in Aerospace Structures   EQF level 8

Delft University of Technology, Delft (The Netherlands)

PhD Major: Structural Analysis
PhD. proposed title:
   Symblectic Integration Corotational Element for Geometrically Non-linear Flexible Beams

Fellowships and Awards:
- Amelia Earhart Award, Zonta International Foundation, USA, May 2006.
- Second Amelia Earhart Award, Zonta International Foundation, USA, May 2007.
- The International Federation of University Women Award, Europe, 2008.

1 Oct 2000–30 Nov 2004

Msc. in Aeronautical Engineering   EQF level 7

Faculty of Engineering, Cairo University, Cairo (Egypt)

Msc. Major: Structural Analysis
Msc. Thesis Title:
   A Finite Element Model for Smart Piezoelectric Actuators and Sensors

1 Jul 1997–1 Sep 2000	**Basic Aircraft Maintenance**

Egypt Air, Cairo (Egypt)

- Avonics system
- Powerplant maintenance
- Airframe maintenance
- Human Factors training
- Aviation Regulations

1 Sep 1995–1 Jul 2000	**Bsc. in Aeronautical Engineering**	EQF level 7

Faculty of Engineering, Cairo University, Cairo (Egypt)

courses covered:

- Fluid dynamics
- Aerodynamics
- Thermodynamics
- Control design
- Structural Analysis
- Vibration Dynamics
- Stability and Control
- Aircraft Propulsion
- Electricity
- Operations Research
- Aviation Regulations

PERSONAL SKILLS

Mother tongue(s)   Arabic

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1	C1	B1	B1	B2
	TOEFL IBT				
German	A1	A2	A1	A1	

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills   Fairly good communication skills with students and academic staff.

Organisational / managerial skills

- Perfect in explaining and manipulating course work.
- Proficiency in course work, schedules and managerial preparations gained through my occupations as an instructor and researcher.

Job-related skills   Expert in :

- Structural Analysis
- Composite Materials

- Finite Element Analysis
- Wind Turbine Design
- MATLAB

Digital skills	SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving	
	Independent user	Independent user	Proficient user	Basic user	Basic user

Digital skills - Self-assessment grid