

Nabil Mamdouh Khalifa

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Career Objective: M.Sc. student and Aerospace Teaching Assistant seeking challenging jobs opportunities in Aerospace and Marine fields in Egypt or abroad.

Work Experience:

- **SEP 2013 - Current:** T.A - Aerospace Department- Major: Aerodynamics and Flight mechanics, Faculty of Engineering, **Cairo University**.
- **SEP 2016 - Current:** T.A - Mechanical Department, School of Science and Engineering, **American University in Cairo (AUC)**.
- **JAN 2015 - Current:** Senior Control and Hydrodynamics Engineer in **Modern Computing Services (MCS OIL)** - Free Zone.
- **SEP 2014 - JUN 2015:** T.A - Mechanical Department, Faculty of Engineering, **Nile University**.
- **AUG - SEP 2011:** Intern, **Arab Organization for Industrialization (AOI Egypt)**. Training on fighters engines overhaul in AOI factories.
- **JUL - AUG 2011:** Intern, **Egypt Air**. Specialized training about aircrafts systems and maintenance.
- **AUG 2010:** Intern, **Petroleum Air Service Egypt (PAS)**. PAS is responsible for workers transportation from the shore to off-shore sites through (Bell) helicopters.
- **JUL 2010:** Intern, Automation and Drives section, **Siemens Egypt**.
- **JUL - AUG 2009:** Intern, **Egypt Air**. Training on commercial airplanes and its systems.

Education:

- M.Sc. in Aerospace, Faculty of Engineering, **Cairo University**- 2017 - Grade: A (3.8)
 - **Master's Thesis:** "*Hydrodynamic modeling and Control for a Remotely Operated Vehicle (ROV)*", a comprehensive model where different forces on vehicle was deducted then hydrodynamic derivatives were calculated using steady and unsteady Computational Fluid Dynamics simulations and a nonlinear simulator was established. Prototype was manufactured, sensors were integrated as pressure sensor, power system and Attitude Heading Reference System with an embedded hardware for control loops and data logging. Finally vehicle response was evaluated by nonlinear simulator to experimentally validate the model.
 - **Achievement:** Advised student projects in different faculties including a flapping graduation project in the AUC and a ROV project in Zewail City of Science and Technology.
- B.Sc. with honors in Aerospace , Faculty of Engineering, **Cairo University** – 2013 - Grade: A (6th rank) - Graduation Project: Micro-Flapping Air Vehicle.

Trainings and Seminars:

- "Teaching assistant professional development workshops" conducted by **Center for Learning & Teaching (CLT)** at **American University in Cairo (AUC)**.
- **Faculty and Leadership Development Center** training package including [managing research teams and exams and students evaluation systems].
- "Researcher Connect" by **British Council** covering modules for abstracts and persuasive proposals.
- "Introduction to Fluent" professional training by Prof. Basman Elhadidi in association with **ENPPI**.
- **Vodafone Egypt** skills training including [vision setting, time management and leadership skills]
- "The 7 Habits of Highly Effective People" seminar by **Dr. Stephen Covey** at Cairo University.
- "Creating Success in Times of Challenge" seminar by Mr. Ralph Watson organized by Impact for Training and Development in association with **Ralph Watson Partnership, UK**.
- Soft skills package by **STP** (student activity) including [communication, interviewing, presentation, coaching, leadership and project management skills]

- “Five Centuries of Turbulence: from da Vinci, to Kolmogorov, to the Universal Log Law” lecture by **Prof. Mohamed Gad-el-Hak**.

Skills:

Technical:

- Programming: [Matlab (Excellent), C++ (Good), Maple (Fair), Fortran (Fair)]
- CFD: [ANSYS (Fluent & ICEM) (Excellent), OpenFOAM (Fair)]
- Mechanical: [SolidWorks (Very good), AutoCAD (Good), FEmap-Nastran (Good), Nx-7(*Uni Graphics*) (Fair), ADAMS (Fair)]
- Control: [LabVIEW (Excellent), Micro-c (Fair)]
- Embedded: [cRIO, myRIO]
- OS: Ubuntu (Linux)
- Other: [Latex (Very good), Tecplot (Very good), Inkscape(good), Fluidsim (Fair)]

Languages: English: Fluent (written and spoken) - German: Fair - Arabic: Native language

Extracurricular activities:

- **2012 - 2013:** Participant at TED Alexandria 2012 and TEDx Cairo 2013.
- **MAY 2011:** Logistics and publications member in the “2nd Annual Egypt State Alumni Conference” of the U.S. Embassy in Cairo.
- **AUG 2010 - DEC 2010:** Project Manager of Engineering Evolution (EE) project at **STP** “*best student activity over Cairo University at 2007*”. EE allows students to practically practice engineering through real execution of projects. **Responsibilities:** Strategy setting, time, budget and marketing planning and mentoring students managing the two below workshops/ projects:
 - “Respire” Recycling workshop aiming to build a recycling machine.
 - “Sunergy” Solar energy workshop aiming to apply solar cells in the faculty of engineering of Cairo University.
- **MAY 09 - APR 2010:** “Energy Saving Techniques” workshop moderator at **STP**. **Responsibilities:** Designing materials & handouts, selection and recruitment of the workshop’s 65 participants and managing client relationship with the workshop academic sponsor: **Siemens Egypt**.
- **JAN 2010:** Participant in a workshop for designing and testing a glider aircraft at the **Unmanned Aerial Systems Development Center (UDC)** “*student activity in the Aerospace Department of Cairo University*”.
- **MAY 08 - APR 09:** Participant in practical programming workshop at **STP**. The 7-sessions workshop included a team project and a simulation to real life problems through programming.
- Member of events organizing committee at **Benaa' Charity Team** aiming to enhance living conditions in Berak Elkhayam random area around Giza governorate.

Personal Data:

Date and place of birth: January 29th, 1992 - Mecca, Kingdom of Saudi Arabia

Nationality: Egyptian

Military status: Temporary exemption

Interest: Member of Heliopolis Club swimming team for 5 years.

References:

Ahmed Aboelmakarem	Software Developer II, ANSYS, +14434493395 ahmed.hussein@ansys.com
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