

ZIAD SAAD BARAKA

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| Birthday: 27.05.1996 in Egypt

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An Interdisciplinary aerospace engineer with a business management graduate degree. Versatile, reliable and flexible with proven skills in project management, organization and research. Eager to join a dynamic team to grow with and use my engineering and management experience.

EDUCATION

Technical University of Munich, School of Management, Germany **OCT. 2020 – NOW**

MSC. IN MANAGEMENT

- ♦ German GPA: 2,6
- ♦ Specialization in Management of Family Enterprises.
- ♦ Pursuing to specializing in Economics & Policy.
- ♦ Thesis topic: The Pay-Off for Committing to Long-Term Sustainability Transformation Targets.

Skolkovo Institute of Science and Technology, Russia

SEP. 2020 – OCT. 2021

MSC. IN SPACE AND ENGINEERING SYSTEMS

(UNFINISHED DEGREE)

- ♦ Cumulative GPA: 3.9/4.0
- ♦ Specialization in Space Systems Engineering and PLM.

University of Science and Technology at Zewail City, Egypt

AUG. 2014 – JUL. 2019

BSC. IN AEROSPACE ENGINEERING

- ♦ Cumulative GPA: 3.57/4.0
- ♦ Honors: CUM LAUDE
- ♦ Bachelor thesis topic: Dielectric Barrier Discharge Plasma Actuators (Active flow control)
- ♦ Studied 8 Control systems courses from Classical control to modern, autonomous and non-linear control.
- ♦ 19TH AUG, 2014, **Granted a Merit based Scholarship** at Zewail city of science and technology for the undergraduate studies.
- ♦ 22ND JAN, 2015, **awarded the provost's Honors roll** for academic excellence at Zewail city.

RELEVANT TECHNICAL EXPERIENCE

Working Student, Flight control laws team

MAR. 2022 – DEC 2022

Volocopter GmbH | *Bruchsal, Germany*

- ♦ Developed new tools for the continuous integration (Jenkins) using python/Matlab
- ♦ Helped the team structure the new standards and apply them along with DO-178c.
- ♦ Programmed new tool set for Simulink/Matlab.
- ♦ Created custom Simulink model advisor checks for qualification of the models.

Researcher-Systems Engineer, Concurrent Design Facility

SEP. 2020 – SEP. 2021

Skolkovo institute of science and technology | *Moscow, Russia*

- ♦ Programmed a mission planning tool for space missions.
- ♦ Created plans for new projects.
- ♦ Worked with SPICE kernels on python and C++ programming.
- ♦ Planned the requirements and was part of the design for an autonomous delivery robot.

INTERNSHIPS & PROJECTS

Summer Intern, Aircraft Maintenance Division
EgyptAir Airlines-Cairo Airport / *Cairo, Egypt*

AUG. 2017 – SEP. 2017

Summer Intern, product development department
PROMECH engineering company | *Cairo, Egypt*

JUL. 2017 – AUG. 2017

Summer Intern, Aerospace Research Lab
Arab Organization for Industrialization | *Helwan, Egypt*

JUL. 2017

Project: Genetic Algorithm Spacecraft 3-D Mission planner

Jan. 2017 – MAY. 2017

Project: Autonomous Underwater Vehicle (AUV) project
Communication and Aerospace Technology Lab at Zewail city | *Egypt, Giza*

AUG. 2015 – JUL. 2017

- ♦ Developed Acoustic localization system for autonomous sound detection and following
- ♦ Creating hull testing strategy and hardware testing including sensors safety.

ACTIVITIES

Organizer, VEX Robotics competition

MAR. 2017

- ♦ Managed the registration desk.
- ♦ Organized testers and Judged during the competition.

Vice head, Quality Control committee

MAR. 2016 – SEP. 2016

Annual science festival at Zewail city of science and technology

- ♦ Conducted interviews.
- ♦ Recruited members.
- ♦ Assigned and formed tasks for team members.
- ♦ Assured the application of quality policy.

Public relations member, PR, *League Young Masters*

JAN. 2015 – SEP. 2015

- ♦ Conducted calls to attract sponsors.
- ♦ Contact person and guide for speakers during events.

AWARDS

- ♦ **Awarded a certificate of appreciation** for working at the Zewail city science festival. **SEP. 2016**
- ♦ **Awarded the 2nd place prize** for the Autonomous Underwater Vehicle (AUV) project in the annual undergraduate scientific conference at Zewail city of science and technology. **SEP. 2015**

SKILLS

Engineering Software Skills:

- ♦ **Programming languages:**
 - MATLAB (expert)
 - C\C++, python (Good knowledge)
- ♦ **Android studio**
- ♦ **ROS**
- ♦ **CAD:** NX, Solidworks, Catia
- ♦ **FEM/CFD:** Ansys, Comsol, OpenFOAM
- ♦ **Systems Tool Kit (STK).**
- ♦ **Unity.**
- ♦ **Jenkins.**
- ♦ **Requirements and PLM:** MagicDraw, DOORS, Valispace, Teamcenter.

Language Skills:

- ♦ Fluency in spoken and written Arabic and English
- ♦ IELTS Overall score: 7.5
- ♦ French A2 level
- ♦ German A1 level. (Currently learning A2)

General Skills:

- ♦ MS (word, excel (with macros) and PowerPoint)
- ♦ Adobe (Photoshop & after effects) CS5, CS6 and CC.
- ♦ Hands-on experience using electrical test equipment.

References upon request.

Heilbronn, Germany
17 Feb. 2023

Ziad Saad