Khaled Mohamed Selem, PhD student, Co-CEO at Crestal medical factory

Teaching Assistant (TA)

Date: 1997/09/19

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Nationality: Egyptian

Summary

Khaled Mohamed Selem holds a Master's degree in Engineering Mathematics from the Faculty of Engineering at Menoufia University, as well as a B.Sc. degree in Mechatronics Engineering from the Faculty of Engineering at the Arab Academy for Science, Technology, and Maritime Transport. He is currently a Teaching Assistant (TA) in the Department of Basic Engineering Science at the same institution. Khaled is seeking to further his academic journey as a PhD student at the University of Valladolid (UVA). He is dedicated to working in a professional environment that fosters skill development, helps achieve his goals, and contributes to the advancement of the workforce through collaborative efforts.

Publication

- Numerical Investigation by Cut-Cell Approach for Turbulent Flow through an Expanded Wall Channel [Axioms, MDPI,Q1]
- Design and Implementation of a Six-Degrees-of-Freedom Underwater Remotely Operated Vehicle [Applied Sciences, MDPI,Q1]
- Effect of Particle Diameter and Void Fraction on Gas-Solid Two-Phase Flow: A Numerical Investigation using the Eulerian-Eulerian Approach

[Springer,Q1]

 Modeling Two-Phase Gas-Solid Flow in Axisymmetric Diffusers using Cut Cell Technique: An Eulerian-Eulerian Approach

[Springer, Q1]

- Assessing the Accuracy of AI Approaches for CO2 Emission Predictions in Buildings
 [elsevier, Q1]
- Optimizing Energy Forecasting Using ANN and RF Models for HVAC and Heating Predictions

[Applied Sciences, MDPI,Q1]

Current position

[From 2020]

Teaching Assistant (full time) at Arab Academy for science, technology and maritime transport (Smart Campus), Egypt

[From 2020]

Co-CEO at Crestal medical factory

Education

[2020-2023]

Master of Science, Engineering Mathematics Faculty of Engineering, Menfoia University

[2015-2020]

Bachelor of Science, Mechatronics Engineering Faculty of Engineering, Arab Academy for Science, Technology and Maritime Transport

Excellent with Honor, GPA 3.95/4.00 (1st in class)

Graduation project: Remotely operated underwater vehicle (ROV)

Grade of project: Excellent (A*)

[2003-2015]

High school from Elnagah school in KuwaitGeneral certificate score: 95%

Training

[2019]

* LifeUp Egypt *

Employability Venture training refers to a degree is no longer enough and return on investment.

[2018]

* Egypt air training *

Aircraft Gas Turbine Engine

Gas Turbine Engine Familiarization Course with Workshop Visits for Undergraduate Engineers.

[2017]

* Egypt air training *

Airframe and Power Plant

Airframe and Power Plant Familiarization Course for Undergraduate.

[2016]

* BMW for maintenance *

Students learn to use BMW tools and diagnostic equipment and study documentation practices important to BMW vehicle warranties. BMW training classes include:

- Vehicle suspension systems
- Ignition and fuel systems

Research interest and skills

- Programming knowledge (Matlab, Inventor, Eagle, easyeda, AutoCAD, C, C++, Fortran)
- Compare CFD results to wind tunnel and pipe test data, in order to validate and calibrate the analyses performed
- Implement physics models into the CFD tools to expand their capabilities
- Generation of computational meshes and performing CFD analyses using standard commercial and/or governmental mesh generators and CFD codes. The latter includes monitoring convergence of both steady state and transient simulations
- Using numerical methods to discretize the equations of fluid is a common approach in computational fluid dynamics

Organization skills

- President of the Student Union for 3 years.

- Member of Resala Association

Language

-Arabic Mother tongue -English Excellent

Achievement

- Got the Seventh place in ROV competition from (Mate company) . [2019]
- -Got the Fifth place in the invent for the plant competition from (Texas university USA).[2018]
- Got the First place in the invent for the plant competition from AASTMT (Arab Academy forScience, Technology and Maritime Transport). [2017]
- Got the First place in the university. [2016]