MOIEZ HAIDER SYED

Date of birth: 26/02/1995 ◇ Nationality: Pakistani
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EDUCATION

Technical University of Munich, Germany *Oct 2018 - Present*
M.Sc. in Computational Mechanics

Eastern Mediterranean University, Northern Cyprus *Sept 2013 - June 2017*
B.Sc. in Mechanical Engineering *(High Honor)*

EXPERIENCE

TUM (collaboration with BMW) *Dec 2019 - Present*
HiWi *Munich, Germany*

- Developing framework for a node-based constraint Shape Optimization; "BMW Shape Module".
- Performed C++ and Python testing with "Catch2" and "unittest" unit-testing frameworks respectively.
- Working on optimizing complex geometries to reduce cost and weight.

DSG Yapi Sinayi *July 2016 - Sept 2016*
Intern *Riyadh,KSA*

- Cooperated with engineering, manufacturing and corporate accounting to to verify that the quality standards were met.
- Manufacturing and Quality control of concrete blocks and ready-mix cement.

TECHNICAL STRENGTHS

Computer Languages	C, C++, Python, MATLAB, JavaScript
CAE Packages	ANSYS, Salome, OpenFOAM, SolidWorks, QBlade
Miscellaneous	Git, LaTeX, ParaView, Linux OS, HTML, CSS

PROJECTS

Development of a FEA program for Reissner-Mindlin plate *June 2019 - Aug 2019*

- Developing a MATLAB finite element methods program which carries out finite element analysis for Reissner-Mindlin plates in bending action (3-D).

Implementation of 2-D solver for Unsteady Navier-Stokes equation *May 2019 - July 2019*

- Finite Difference MATLAB implementation of 2-D unsteady NSE using explicit, implicit and higher order Runge Kutta temporal schemes along with Central Difference (CDS) Spatial scheme.

Automatic Mesh Generation in a Python Environment *Mar 2019 - Dec 2019*

- Mesh Generation of arbitrary shapes, using triangular elements, followed by Finite Element Analysis.

Analyzing Water Supply Network for a village in Bavaria *Dec 2018 - Feb 2019*

· Developing C++ console application to calculate the flow in tubes of the pipe network.

Design of a Vertical Axis Wind Turbine for Urban Utility (Bachelor Thesis) *Oct 2016 - June 2017*

· Fabrication and Design of a hybrid wind turbine based on the Kliux Zebra vertical axis wind turbine, with the goal to optimize the drag and lift forces.

· Design carried out using SolidWorks, whereas the Analysis of the turbine was carried out using XFLR5 (Air-foil analysis), QBlade (Blade Analysis) and ANSYS (Complete rotor analysis).

CERTIFICATIONS

Software Development Lifecycle Specialization [coursera] *Aug 2020 - Present*
University of Minnesota, USA

The Unreal Engine Developer Course *Jan 2018 - Feb 2018*
Udemy

Python Data Structures [coursera] *Nov 2017 - Dec 2017*
University of Michigan, USA

Wind Energy [coursera] *Sept 2017 - Oct 2017*
Technical University of Denmark (DTU), Denmark

HONORS

Member of American Society of Mechanical Engineers Students Club *Feb 2016 - June 2017*
Eastern Mediterranean University, Northern Cyprus

Member of the EMU Warriors (Cricket Club) *Mar 2015 - Jan 2017*
Eastern Mediterranean University, Northern Cyprus

Certificate of High Honor (5) *Mar 2014 - June 2017*
Eastern Mediterranean University, Northern Cyprus

LANGUAGES

Urdu
Native

English
IELTS: 8.0