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SUMMARY

A highly motivated engineering graduate with a robust interest in STEM who has worked under independent and team working scenarios encompassing diverse fields. Values problem solving with given constraints and gives importance to presentation and leadership skills.

EDUCATION

Arizona State University, Tempe, AZ

M.Sc., Mechanical Engineering, May 2019

GPA: 3.73

Thesis: A Collation and Analysis of Two-Dimensional Unsplit Conservative

Advection Methods for Volume of Fluid at Interfaces

B.Sc., Mechanical Engineering (Computational Mechanics), May 2016 GPA: 3.40

PROJECTS

2018: Economical Solar/Net Metering Analysis Project

Team Position: Leader. Coded a software to compute the ROI of a small business terrace solar installation.

2018: High Performance Computing Project

Solved a numerical method using Distributed Computing on C and Fortran

2018: Spectral Computational Fluid Dynamics (CFD) Project

Coded a highly accurate method for solving Laminar flows and Heat Exchange.

2017: Robot Trajectory Planning Project

Coded a trajectory for KUKA robotic arms with obstacle avoidance.

2017: Multiphase CFD Project

Generated Codes to run and validate state-of-the-art multiphase methods.

2017: Finite Element Project

Coded a mesh and solution to static deformation from scratch.

2015-2016: Senior Capstone Project

Automated Fire Extinguishing mechanisms for automobiles in emergency scenarios. Lead team through planning, designing, fabrication, assembly, and testing. Minimized false positives with CO_2 and IR flame sensing and explored CFD simulation

2013-2016: Engineering Projects in Community Service (EPICS)

Team Position: Deputy Leader. Partnered with STARS (Scottsdale Training & Rehabilitation Services) to engineer an efficient and reliable navigation system for assisting visually impaired individuals.

SKILLS

Languages: MATLAB, C, Python, FORTRAN, JAVA, HTML, Javascript.

General: Parallel Computing, Experimental Statistics, CAD, Interactive Application Design, FMEA, Real-time-Data Visualizations, UNIX shell scripting, OOP.

Applications: SOLIDWORKS, PTC CREO, MATLAB, ANSYS Geometry, Structural and Fluent, Microsoft Office (Macro-Enabled), Blender 3D, Adobe Photoshop, Adobe AfterEffects.

Numerical: Spectral Analysis, Trajectory Planning for Robotic Arms, LIDAR Wind Data Processing, Static Deformation, and Computational Fluid Dynamics.

Hardware: Power Tools, Arduino Devices (Intel Galileo), Raspberry Pi, Oscilloscope,

Microcontroller, Linear Actuators, Short Range Binary Wireless Communication

EXPERIENCE

Teaching Assistant

SEMTE || ASU

January 2018 - May 2019

Tempe, Arizona

Operated wind tunnel labs with sensitive equipment for Aerodynamics Lab. Did **programming tutorials**.

Summer Technology Assistant

Saudi Aramco Schools

2013 - 2016

Tempe, Arizona

Statistically analyzed middle school fitness data using algorithms under Macro-Enabled MS Office spreadsheets and documents to generate individual reports after data entry.