Muhammad Usama Navid

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Data-driven and detail-oriented mechanical engineering graduate with a proven academic record and having a robust understanding of the incoming industrial revolution. Eger to foster a prospective carrier in Style Textile starting as an associate engineer, leveraging my strong theoretical background in manufacturing, engineering management, and artificial intelligence.

EDUCATION

UNIVERSITY OF ENGINEERING AND TECHNOLOGY LAHORE

BSc Mechanical Engineering
Oct 2017 - Jul 2021 | Lahore, PK.
Dean's List (Spring 2018)
CGPA: 3.4/4.0

PUNJAB GROUP OF COLLEGES

FSc Pre-Engineering
Apr 2015 - May 2017 | Multan, PK.
Percentage: 89%

CO-CURRICULAR

- Team Lead AI
  Google Developers Student Club UET
- Microsoft Learn Student Ambassador
- Autodesk Student Ambassador
- Member UET Science Society

HONORS & AWARDS

BERTELSMANN TECHNOLOGY SCHOLAR

Data Analyst Nanodegree
Udacity 2020

ACHIEVER'S SCHOLARSHIP

STEP by PGC 2017

SKILLS

Supply Chain Management • Digital Manufacturing (CAD & CAE) • Project Management • Data Analytics & Machine Learning • Deep Learning

TOOLS

SolidWorks • Fusion 360 • AutoCAD Abaqus • Matlab / Octaves • MS Office Minitab • LaTeX • Python • HTML • Linux Numpy • Pandas • Matplotlib • Keras Scikit Learn • TensorFlow 2.0

SOFT SKILLS

Positive Attitude • Self-Motivation Storytelling • Creativity • Collaboration Digital Mindset • Agility

EXPERIENCE

ROSHAN KAL PROGRAM PEPSICO (HAIDRI BEVERAGES)

Procurement Intern July, 2021 – August 2021
Evaluated raw material with respect to fluctuation in base material prices. Prices of top ten base materials including aluminum were analyzed.

PROJECTS

PREDICTION OF WEAR IN TOTAL KNEE REPLACEMENT | And Effect Of Knee Implant Size On It After Simulation In Abaqus

- Modeled a Knee implant model in SolidWorks.
- Used Abaqus to do static analysis to predict wear using empirical relations available in literature. (Abstract accepted at ECBB 2021)

3D MODELING AND DESIGN VISUALIZATIONS | Designs Using Autodesk Fusion 360 And Sketchbook Pro In Tandem.

- Developed a shoe model using Fusion's form modeling.
- Modeled and rendered a Jeep and a Car in fusion 360.

LIGHTWEIGHTQUAD-COPTER DESIGN | In Fusion 360

- Designed a lightweight Quadcopter in fusion 360 using surface, form, and path workspaces.
- Done the aerodynamic and force analysis of the quadcopter to lift battery, its body, camera, and other sensors.

PREDICTING QUALITY OF POTATO CHIPS | Using AI

- After literature review of different techniques gathered a dataset of potato chips images.
- Trained a VGG-19 model after transfer learning to achieve 100% efficiency in detecting potato chips quality using camera images.

PEDESTRIAN TRUSSED BRIDGE | Review And Analysis

- A case study about pedestrian trussed bridge that included its modeling and static analysis.
- Compared the results obtained through different static analysis techniques.

STATE OF THE ART MACHINE LEARNING | Car Detection, Face Detection And Binary Classification

- Applied state of the art machine learning techniques for Face Detection, Car detection and Binary classification problems. • Built custom Deep Learning architectures in TensorFlow and PyTorch.

ONLINE COURSES

Supply Chain Management Specialization	Rutgers the State University
Data Science Specialization	IBM
Introduction to IOT	UC Irvine
Digital Manufacturing and Design	University at Buffalo
Intro to Digital Manufacturing	Autodesk
Introduction to Generative Design	Autodesk
Deep Learning Specialization	Deeplearning.ai