Muhammad Usama Navid

Https://UsamaNavid.Com
concaption@gmail.com | +92.316.653.1625

EDUCATION

UNIVERSITY OF ENGINEERING AND TECHNOLOGY
BSc Mechanical Engineering
Expected Oct 2021 | Lahore, PK
Dean's List (Spring 2018)
CGPA: 3.4/4.0

PUNJAB GROUP OF COLLEGES
Grad. May 2017 | Multan, PK
FSc: 88 % • Matric: 94 %

LINKS

LinkedIn:// **muqadir1**
Github:// **concaption**
Website: **UsamaNavid.com**
Blog: **Blog.UsamaNavid.com**

SKILLS

Digital Manufacturing (CAD & CAE)
Project Management • Data Science
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

COURSEWORK

UNDERGRADUATE

Project Management
Engineering Dynamics
Manufacturing Processes
Quality Assurances
Machine Design

OPENCOURSEWARE

Machine Learning (Stanford @ Coursera)
Data Science Specialization (IBM @ Coursera)
Intro to Digital Manufacturing (Autodesk)
Intro to Generative Design (Autodesk)
Intro to IoT (UC Irvine @ Coursera)
DMD (University of Buffalo @ Coursera)
Deep Learning • Advanced TensorFlow
(DeepLearning.ai @ Coursera)

PROJECTS

3D MODELING AND DESIGN VISUALIZATIONS | Designs Using Autodesk Fusion 360 and Sketchbook Pro in Tendom

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

LIGHTWEIGHT QUAD-COPTER DESIGN | in Fusion 360

- Designed a light weight Quad-copter in fusion 360 using surface, form and path work-spaces.
- Done the aerodynamic and force analysis of the quad-copter to lift camera and other sensors.

UNCERTAINTY QUANTIFICATION | in the Efficiency of Mangla Dam Using Jupyter Notebook

- Used Numpy, Pandas and Matplotlib libraries in Python to pre-process, analyze ad visualize the data.
- Found the uncertainty in efficiency by creating cumulative distribution functions.

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.

ARDUINO CAR | Bluetooth Controlled

- Assembled and programmed the electronics to make a Bluetooth controlled car using Arduino, actuators, sensors and drivers.

MACHINE LEARNING PROJECTS | Using Tensorflow, Keras and Scikit Learn

- Built a deeplearning model in python from scratch to classify cats and non cats. (Binary classification Problem) Also applied neural networks, SVM and other models for personal machine learning projects.

HONORS & AWARDS

2019	Udacity	Bertelsmann Technology Scholarship (Data Analyst Nanodegree)
2017	STEP by PGC	Achiever's Scholarship

SOCIETIES

Jan 2020	International	Autodesk Student Ambassador
Jan 2020	On Campus	IEEE Computer Society UET
Dec 2019	On Campus	IEEE RAS UET
Sep 2019	On Campus	Google Developer Student Club
Jan 2019	On Campus	UET Science Society
Sep 2018	On Campus	Hult Prize UET