Shashank Mewada

Certified Data Science Professional

📱 (+44) 7438 591 886
✉ gmshashank@gmail.com
in /in/shashankmewada
⌗ gmshashank

DATA SCIENCE PROJECTS

Object detection and Monocular Depth Estimation using PyTorch
- Combined YOLOv3 with MiDaS for joint Object detection and Monocular Depth Estimation
- The model was trained on custom dataset for Personal Protective Equipment

Human Pose Estimation using ONNX models on Azure
- Implemented the paper - Simple Baselines for Human Pose Estimation and Tracking
- The ONNX Model was deployed to Cloud using Azure Functions

Object Detection using PyTorch
- Object Detection was done using Pytorch implementation of Yolov3.
- The model was trained on custom dataset for Personal Protective Equipment

OFFICE PROJECTS

Vibration and Shock Calculator
- Develop calculator for Multi degree Vibration and Shock Calculation of multiple mass system
- Implement the complete Software Development Cycle of the project
- Program routines to visualize the CAD Geometry, plot the Response Curves, export Mode shapes Animation and generate Reports.

Auto Ballooning in Technical Drawings
- Process input files in DWG / PDF / TIFF format
- Implement program to place the balloon tags optimally in the unoccupied space
- Collect custom data and train Tesseract models for OCR of GD&T symbols.
- Generate First Article Inspection Report (AS9102) in Excel.

Surface Generation from Triangular Mesh, DICOM dataset
- Improve quality of surface triangular mesh using Meshmixer
- Generate good continuity surfaces using CATIA
- Segment DICOM dataset and create STL files for 3D printing

PATENT

Phatak et al. 2016 , Method for Lossless Compression and Regeneration of Digital Design Data , US10891759B2
Patent Issue Date: Jan. 12 , 2021

EXPERIENCE

AMP Engineering Design Ventures LLP
Senior Software Engineer
Jul 2016 - Present | Mumbai, MH
- Implement Agile methodology to the project
- Design the workflow/architecture of the project and manage the Team
- Software Development, Testing and Deployment for CAD Design Process
- Perform Structural/Fluid simulations for Root cause analysis

Graduate Engineer
Jul 2013 - Jul 2016 | Mumbai, MH
- Write programs to automate manual CAD Design procedures.
- Model 3D CAD Parts and create Assemblies.

SKILLS

Machine Learning
- Pytorch
- Pandas
- Matplotlib
- NumPy
- Scikit-learn
- OpenCV

Programming
- Python
- C#
- C++
- SQL

Technology
- Azure
- VS Studio
- Windows
- LaTeX
- Github
- Excel
- Linux

CAD
- ANSYS
- SolidWorks
- OpenGL
- CATIA
- AutoCAD
- Meshmixer

SELF LEARNING

- **Computer Vision III: Detection, Segmentation and Tracking (CV3DST)**
Jan 2021 - Present

- **Extensive Vision AI Program**
Sep 2020 - Dec 2020

MOOC

- **Deep Learning Specialization, deeplearning.ai, Coursera**
May 2020 - Aug 2020
- 2SU44333JUZH

- **Applied Data Science with Python, University of Michigan, Coursera** Jan 2020 - Jun 2020
- R74FYAN3SEMP

EDUCATION

University of Mumbai
Bachelor of Mechanical Engineering May 2012 | Mumbai, MH
- First Class