

Pujari Umesh

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ACADEMIC DETAILS

Year	Degree/Exam	Institute	GPA/Marks(%)
Dec, 2020 - present	B.TECH in Electronics and Comm.	Indian Institute Of Information Technology,Kottayam	8.93
2018-2020	A.P.S.S.C	Fitjee Junior College	9.56
2018	C.B.S.E	Sri Sathya Sai Vidya Vihar	88.80 %

INTERNSHIPS

- **Computer vision Intern, UST Global(Trivendrum) (Jun, 2022 - July, 2022)** : Helped develop a project to make an attendance marking system using computer vision for the company.If people are viewed by the webcam the algorithm recognises the faces based on the trained set and creates a csv file with the attended candidates along with date and time **URL** <https://github.com/Interns21/umesh-cv-attendance-system>

PROJECTS

- **Generative Adversarial Nets for digit generation** (oct,2022-oct,2022) : Developed a Deep Learning generative adversarial model having a generator and discriminator with multi-layer perceptrons and CNNs that generates handwritten digit images
- **Emotion Recognizer for images and videos**(sept,2022,-sept2022):Trained with custom Convolutional layer networks which classifies seven different emotions on the images and videos along with the detection of ROI of faces with displayed confidence level
- **Object Recognition** :A Model that can Recognise 100 different types of objects which is developed using the VGG19(complex CNN model) transfer learning that has a 95 percent accuracy
- **Style Transfer neural net** :Implemented a style transfer algorithm that takes the style of one image and incorporates it on the content of another image.
- **Deep Dream** :Developed a computer vision project that generates over-processed images with dream-like hallucinogenic appearance from the images provided using the mixed layers of InceptionV3 neural network
- **Speech Recognition system** :A model that is trained with CNN layers which takes short term fourier transform spectrograms of audio samples to recognise 35 different words
- **Face Mask Detection** :A Model that can detect whether a face mask is worn or not using a EfficientnetV3 convolution neural network with an accuracy of 96 percent that is trained with 11,000 images
- **Liver Disease Predictor** :A Machine Learning Model that Predicts the state of Liver disease using Random Forests(an ensemble) based on the patient's report with 97 percent accuracy
- **USA House Price Predictor** :A Machine Learning model that predicts the price of a house based on different features of the house
- **Registration and Login system using c++**

TECHNICAL SKILLS

- **Languages:** Python (proficient), C (proficient), C++ (proficient), Java, Verilog, Arduino, 8086 programming.
- **Tools and Frameworks** - Scikit-Learn,Tensorflow,PyCaret,Keras,OpenCV,AWS Cloud,MATLAB, SHAP explainable AI,Tensorboard,Seaborn,Matplotlib, Scipy,YOLOv5,Pandas,Matplotlib,tkinter,L^AT_EX

- **Skills** Data Science,Machine Learning,Deep Learning,Computer vision,Programming,Data Analytics,Data Visualisation,Image Processing

TRAININGS

- **Machine Learning** course by internationally well known professor Andrew Ng where we get to learn the regression methods ,classification methods, neural networks , SVMs,Knn,Desicion Tress,Ensembles,SHAP visualisation
- **Deep Learning** Understanding the Deep Learning to solving real-world problems using Artificial Neural Networks and Convolutional Neural Networks (CNNs)
- **Computer Vision** Understanding various computer vision algorithms like face recognition,image classification,image segmentation,transfer learning,style transfer and generative techniques.
- **Python Programming And Software Design**
- **Internet Of Things And Embedded Systems** Learnt about cloud platforms like blynk, thingspeak and wifi modules like esp32 ,nodeMcu,LoRa module and information about sensors and learnt how to send data over the thingspeak api using arduino and display the analytics of the data
- **A 5 Day Hands On Workshop On Industrial Automation**A Hands on workshop where we learnt about the usage of mitsubhishi FX2N6UMT MELSEC PLCs and AC drive FV 520SE and its MELSEC software using laddar logic to program the PLC for different Purposes

POSITIONS OF RESPONSIBILITY

- **CLASS REPRESENTATIVE, INDIAN INSTITUTE OF INFORMATION TECHNOLOGY,KOTTAYAM** (Dec,2021-present)
- **CAPTAIN AT SSSVV SCHOOL(2017-2017)**
- **17th Rank in GeeksforGeeks iiit kottayam.**
- **Oraganising Member of Adivya,IIITK** : Participated as an active member of aDAVYA and helped organising several events.