



# Sanidhya Mangal

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## \* Skills

- C
- Calculus
- Python
- Analyze
- Keras
- System
- Technical
- Video
- Design
- Apis
- Machine learning
- Rest
- Sql
- Teaching
- Algorithms
- Research
- Ai
- Tensorflow
- Tv
- Docker
- Transport
- English
- Pattern
- Database
- Networking
- Analytics
- Healthcare
- Architectures
- C++
- Flask
- Facebook
- Newspaper
- Architecture
- Cad
- Cloud
- Training
- Computer science
- Mathematics
- Django

## Work Experience

Total Experience: 0 Year 0 Months

1)EngineerBabu Indore , Madhya Pradesh Machine Learning Engineer June 2020 Present  
Worked along a research group to design a Computer Aided Diagnosis ( CAD ) for diagnosing lung and colon cancer histopathological images using Deep Convolution Neural Networks ( CNN ) Presently leading a team of 6 developers to develop a deep learning model to verify people using selfie and 3D video - By far reduced the inference time by 30 % from predecessors and bumped confidence to 86 % . Also , served these models using Django Based REST APIs Developing framework for Edge AI Video Analytics and Object tracking on top of Tensorflow and Django Rest Framework .

2)Greater Kailash Hospitals Indore , Madhya Pradesh Research Intern January 2020 April 2020 Designed the shallow CNN for diagnosing pneumonia and malaria using X - Ray and blood slides respectively with an area under curve ( AUC ) of 0.94 . Model was deployed as a web app which worked as a second opinion for the doctors , reducing false negative by 23 % . Through Thoughts Indore , Madhya Pradesh Summer Intern ( Machine Learning ) June 2019 August 2019 Modelled a skin cancer lesion detection system with the help of transfer learning method ( CNNs ) . Implemented MobileNetv2 ( pretrained model ) using Python and TensorFlow to achieve 89 % accuracy .

## Projects

1)GAN projects December 2020 Present A lightweight framework for tooling Generative Adversarial Networks , built on top of Tensorflow . Currently , in alpha mode continuous work is carried out to add more models and architectures .

2)GAN Farm July 2018 September 2019 This project consists of multiple DCGAN architectures and various training strategies such as WGAN , Vanilla GAN , LSGAN , etc on fashion mnist dataset . In addition to this same architecture was used for generation of anime faces and pokemons .

3)Image Colorization using GANs September 2019 December 2019 Developed an automated image colorization using GANs similar to deoldify , as a major thesis outperforming its predecessors such as Unet . Multilayer CNN architecture implemented using core TensorFlow .

4)Image Generation using Generative Models December 2018 January 2019 The main objective of this project is to demonstrate the generative nature of variational autoencoders ( VAE ) . Model was trained on MNIST handwritten digits to generate handwritten digits of 28x28 px with an accuracy of around 69 % .