Vishwanathan Vivek S

Roll No:190103113
B.Tech - Mechanical Engineering
Minor in Mathematics
Indian Institute Of Technology, Guwahati

+91-8428173431
vvivek@iitg.ac.in
vishwavivek0562@outlook.com
github.com/vviveks
linkedin.com/in/vviveks

EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Tech. Major	Indian Institute of Technology, Guwahati	7.89 (Current)	2019-Present
Senior Secondary	State Board	93.67%	2019
Secondary	State Board	97.8%	2017

PROJECTS

- **Video Captioning Project** *2022*
  Personal project github/video-captioning-project
  - Developed an **Encoder-Decoder Attention** model which can generate captions on small video-clips.
  - Preprocessed using **OpenCV** and extracted feature vectors of the video-clips from **MSVD dataset** using **transfer learning** and passed on to the model for training.
  - Trained the model for 40 epochs with a **Bleu score** of 21.55
  - Techstack involved: Pytorch, OpenCV, Spacy

- **Blur Face Web Application** *2022-Ongoing*
  Consulting & Analytics Club github/BlurFace
  - Implemented a custom **YoloV3** model from scratch which is trained on **WIDERFace dataset** to blur the faces in a real time video. Faces in the image is blurred using **Gaussian Blur**.
  - Deploying the model using **Flask** with User Interface having options to blur real-time feed or images from the user.
  - Techstack involved: Pytorch, OpenCV

- **Fake Smile Detection** *2022*
  Personal project github/FakeSmileDetection
  - Developed an **Ensemble model** architecture with **ResNet, DenseNet and AlexNet** pre-trained models which can detect the fake smile with an accuracy score of 80% based on the user image.
  - Preprocessed and extracted key portions of the image using **OpenCV** and passed on to the model for training.
  - Techstack involved: Pytorch, OpenCV

ACHIEVEMENTS

- **IITG.ai Hackathon**, Secured **1st** position in the Machine Learning Hackathon, IITG.ai Club *2021*
- **C&A Hackathon**, Secured **2nd** position in Devnagri Script Classification, Consulting and Analytics Club. *2021*
- **Cascade Cup**, Secured **21st** position out of 1087 teams participated, Cascade Cup. *2022*
- **Kaggle Notebooks Expert**, Top **1%** among 200,000+ notebooks experts *2022*

TECHNICAL SKILLS

- **Programming**: Python, C/C++
- **Frameworks and Toolkits**: PyTorch, Scikit-Learn, Numpy, Pandas, TensorFlow, OpenCV*, Django*
- **Operating Systems**: Windows, Linux

KEY COURSES TAKEN

- **Mathematics**: Linear Algebra, Basic Calculus, Mathematical Statistics, Scientific Computing
- **Computer Science**: Introduction to Computing, Computing Laboratory
- **MOOCs**: Deep Learning Specialization - DeepLearning.AI

POSITIONS OF RESPONSIBILITY

- **Secretary**, Chess Club, IIT Guwahati. *May, 2021 - May, 2022*
- **Core Member**, Consulting and Analytics Club, IIT Guwahati. *2021 - Present*
- **Member**, IITG.ai Club, IIT Guwahati. *2021 - Present*

EXTRACURRICULAR

- **Inter IIT Chess Meet**, Represented IIT Guwahati in University Chess competition held in **IIT Kharagpur.** *2019*
- **Silver Medal**, Inter Hostel Chess tournament. *Spardha, 2020*