

Yash Chandel UG (IV Year I Semester) B.Tech. (Metallurgical & Materials Engineering)

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Area of Interest

Data Structure and Algorithms, Android Development, Computer Vision, Machine Learning

_____ Education

Year	Degree/Examination	Institution/Board	CGPA/ Percentage
2022	B.Tech. 3rd Year	Indian Institute of Technology, Roorkee	7.479
2018	Intermediate (Class XII)	Wardman Convent H S School	92.00 %
2016	Matriculate (Class X)	Wardman Convent H S School	92.16 %

Internships

Android ML | AppyHigh Technology LLP

July 2021 - July 2022

- Beauty App (currently not released on google play store and is direct competitor of banned Chinese beautification apps). (a) Trained a bilateral segmentation model for generating segmentation mask of facial attributes using Celeb HQ dataset. (b) Convert the tensor -flow saved model to tflite(F32)model and integrate it in android app using tensorflow-lite java API. (c) Used OpenCV java Sdk and mlkit to create pipeline => cropping face -> segmentation of face -> image processing -> final output. The final result is full fledge apk you can used for face beautification (lips coloring, hair coloring etc. features).
- Implemented Automatic Capture feature in Scanner Go app(available on google play store with 30 M + downloads). (a)Trained E-net (A Deep Neural Network Architecture for Real-Time Semantic Segmentation) for paper segmentation on the data collected from users. E-Net is up to 18x faster, requires 75x less FLOPs, has 79x less parameters and provides similar or better accuracy to existing models. (b)Used CameraX library, rx-java, open cv java sdk, tflite java api for rendering E net tflite model on each frame and

displaying its result on Image-view and wrote some custom function to capture doc image if mask is constant for some sec(2 sec).

- Cartoon Photo Editor Toon App (recently launched on google play store with 5Lakh + download). (a) Working on creating a image rejection pipeline so that only good picture will go on model and good output will come. (b) Wrote full image rejection pipeline in java using opency java sdk and some other image processing libraries.
- Implement real time 2D face filter and real time face beautification (like lips, hair coloring . etc) feature in beauty App. (a)Used Google MediaPipe a cross-platform, customizable ML solutions for live and streaming media . (b)Used face Mesh and hair segmentation a ready to use solution for live filters wrote some custom function to paste filters on face mesh and to color segmented hairs in mediapipe framework and compile it to form android archive files and integrate the obtained aar file using camerax library to render 2D filters in real time.
- Implemented real time 3D face filters features in beauty app. (a) Working with opengl c a graphical library along with mediapipe to render 3D based graphical model on face mesh and compile mediapipe into aar file and then integrate that file in android using camerax library. During compiling of mediapipe all the pipeline is converted into graph and is render in android using egl manager provided by mediapipe.

Projects

project Binary | Enactus

February 06, 2020 - April 07, 2021

 Mainly our work is to collect the waste computers from IITR and then replacing its corrupted hardware part with the help of an NGO and then set it in poor schools around Roorkee. Which add computer education in their life and then design their computer course curriculum.

Awards / Scholarships / Academic Achievements

· Represent IIT Roorkee in Enactus India Competition, Nationwide Social Entrepreneurship, and Innovation Challenge

Skills

Computer languages Expert in Object oriented language C++,Python and Java. Expert in Data structure and

Algorithms

Additional Courses Coursera Certificate of Tensorflow Developer by deeplearning.ai Coursera Deep Learning

Specialization certificate.

Languages Known Hindi(SRW) English(SRW)

Positions of Responsibility & Extra Curriculars

Head Of Project Jeet | Enactus IITR

April 07, 2021 - Present

- Working on an online platform where aspirants can freely access all the study materials.
- · Compiling all the open-source study materials in a well organized and structured way

September 04, 2019 - September 02, 2020

• Taken part in events such as Republic Day Parade, Shooting round with BRNO .22 Deluxe rifle, Marathon, cycling, skit, and debate activities.