Developer Journal : DLRV Project

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Date	Task	Problems	Solution
22.10.2021	Discussion regarding possible topics		
04.11.2021	Finalizing the topic for the project		
11.11.2021	Pitching the idea of the project		
12.11.2021	Creation of meistertask board – for task planning		
16.11.2021 - 24.11.2021	Literature Review and Project Proposal Writing		
24.11.2021 - 16.12.2021	Understanding basics of image segmentation and setting up of GPU	GPU driver compatibility issues with CUDA development kit version and tensorflow version	Found the working combination of all 3 at the tensorflow website
03.01.2022 - 05.01.2022	Implementation of a basic U- Net Architecture	1. Google collab: very slow and would stop the training after an hour 2. Only 2 members in the group with a good GPU 3.	Solution deployed for 3: To get better results, tried data augmentation but didn't help a lot. Tried ensemble networks

		Results: IoU not very good with the U-Net architecture	for encoder blocks: VGG, Inception, ResNet
06.01.2022 - 11.01.2022	Tried ensemble methods for the encoder block with pretrained weights	1. Limited amount of GPU memory so had to adjust data 2. Data labelled poorly so results obtained were not interpretable which further prevented implementation of early stop in training 3. IoU not improving with training due to poorly labelled data (even with the ensemble network)	Solution deployed for Problem 1. Model was trained in different chunks and different resolutions due to memory limitations Solution deployed for problems 2,3. Models were trained for 100 epochs and visual inspection of prediction was used for analysing the results
12.01.2022- 13.01.2022	Working on presentation		