Segmentation module for autonomous car

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Weekly Report for 18^{th} - 25^{th} Jan

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Overview

This is a weekly report for the project gesture recognition from a wearable device. This contains the progress made by me on the project in the week of 18^{th} January - 25^{th} January, target for the next week and tentative timelines for the project.

Progress made this week

1. Took an overview of the project and understood my responsibilites.
2. Started learning about deep learning.
3. Became familiar with the various modules of python such as numpy, matplotlib, etc.
4. Developed a deep learning algorithm using a sigmoid function to predict the image of a cat. Worked at about 70% accuracy on test dataset.

Time track of the week

1. Meetings (2 hours)
2. Learning about deep learning (8 hours)
3. Planning and report writing (3 hours)

Target for the next week

1) Learn about neural networks

Learn about neural networks. Learn about it's activation function and back propogation to optimise it's parameters.

2) Learn about deep neural networks

Learn about what are deep neural networks? How are they formed? How could they be used? Implement them to some example problems.

Tentative timeline for the project

- 18^{th} Jan - 27^{th} Feb: Learn about deep learning and computer vision and learn how it could be applied to the project.
- 28^{th} Feb - 28^{th} March: Development of an efficient computer vision model using deep neural networks for the car.
- 29^{th} March - 11^{th} April: Adding various constraints to the model and validating it.
- 12^{th} April - 26^{th} April: Implementation of the segmentation module on the car.
- 27^{th} April - 2^{nd} May: buffer week [1]
- 4^{th} May: Final presentation of the project. [2]

[1] These are tentative timelines and may need to change depending on the complexity of the material encountered.
[2] This is a tentative date and is subject to the availability of guide.

THE END

THANK YOU
