



NUMBER-PLATE RECOGNITION

Report 1 – Project Introduction

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I. Project Introduction

1. Overview

1.1 Project Information

- Project name: NUMBER-PLATE RECOGNITION
- Group name: IDK

1.2 Project Team

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2. Problem & Motivation

- Autonomic license number plate recognition (ALPR/ANPR) has become a topic which is developed and applied successfully in our world.
- There are many ways to solve this problem. Many effort has been made to improve ALPR more reliability and accurate nowadays. Each model has its own pros and cons.
- Our project is to detect and recognize the license plate by the best suitable model. We will work on researched solutions, find out how to do from easy to hard, compare and connect (if we can) to make the last model.

Our Aim:

- Can create a model to detect and recognize the license plate.
- Can solve as much challenges as we can:
 - Perspective / viewing angle
 - Color
 - Illumination
 - Frame
 - Low resolution
 - Special character
 - Weird plate
- Real-time model
- Multi Object detection and recognition model.

Our Scope:

- Firstly, solve the problem on one - row plate. And better is for both one – row and two – row plate.
- Prioritize solving single – object problems.
- Solve the problem with Vietnamese license plate.

3. Literature review

The method used for ALPR is particularly segmentation approaches. It' s typically has 2 steps, character segmentation and character recognition. Because there are 2 type of license plate which are two-row and one-row. We prioritize to solve the problem with one-row license. Two – rows license can be solve as one-row problem after go through EAST model (based on Tee Kai Feng

solution on LICENSE PLATE RECOGNITION USING CONVOLUTIONAL RECURRENT NEURAL NETWORK, 2019). With one-row license problem, we try to solve and compare based on researched solutions.

References:

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4. Contribution