

## 1. Introduction

### Overview of entire SRS

#### 1.1 Purpose

##### a) purpose of SRS

The purpose of this requirements document is to bring clarity to the project by indicating what the hardline requirements are for the project to be considered a success. This will be done with the consideration that the desired end product may not be achievable and as a result will be treated as a form of research project or proof of concept.

##### b) specify intended audience for this SRS

Intended target audience for this document is our client and by extension CDK given this is their idea and the success of the project directly assists them. In addition, our instructors and teaching assistant are extensively involved in this project and they will be using this as a grading guideline. The assumption is that the reader is familiar with general concepts within computer science including artificial intelligence, common programming languages, and coding environments.

#### 1.2 Scope

##### a) Identify software product to be produced

The product being developed will be a variant of open source AI that will be tailored to scanning submitted forms by CDK. With the inclusion of stretch goals this platform may also analyze driver licenses, vehicle imaging, or name to vehicle identification.

##### b) Explain what it will and won't do

This project will be capable of analyzing a submitted form to locate its signature box and check to see if it has been signed. It will also prompt the operator if it is not certain of what it is observing and if a cosigner box is also present. The format of these submissions will be in PDF format. Stretch goals include the capacity to detect expiration dates on driver's licenses and determine what make and model of a vehicle is based on a submitted image. Additional file formats are also being considered.

##### c) Application of software: benefits, objectives, and goals

Benefits from this product include reduced costs for CDK in error checking forms, rapid validation of a document, and a singular platform that can scan the various form styles that CDK possesses. Another

goal of this design is the ability for it to expand upon itself and adapt to new forms that may be introduced by permitting operator confirmation or override on its assessment.

### 1.3 Definitions, Acronyms, and Abbreviations

- a) List all terms, acronyms, and abbreviations required to understand the SRS

Open source AI is a free to access platform in which the code can be used and implemented as seen fit by the operator. OpenCV is a popular image processing example of this as well as TensorFlow and DL4j. Programming languages that may be used include C++, Python, and Java. The use of an IDE is likely, which means Integrated Development Environment which provides a more convenient setup for coding. Examples of IDE's include Microsoft Visual Studio and Eclipse. Black box design means that the user does not need to understand the internal functions of the program, just what it wants as input and what the user will receive as the output.

### 1.4 References

- a) List references here

### 1.5 Overview

- a) Describe what the remainder of the SRS contains

The remainder of the requirements document will contain a greater look into what precisely the project entails. This is going to involve looking at where the project stands for CDK and how it will be utilized as well as the products functions and characteristics for a user. Mention will also be made towards potential constraints placed upon the program.

- b) Explain how the SRS is organized

The following section will be a general overview and description of the project, primary focus being placed on functions, characteristics, constraints, and assumptions/dependencies. After that there will be a section on specific requirements that will bring mention to potential interfacing concerns as well as performance metrics and standards compliance.

## 2. Overall Description

### 2.1 Product Perspective

- a) Indicate if this product is standalone or to be integrated
- b) Depict how the software operates within various constraints

### 2.2 Product Functions

### 2.3 User Characteristics

2.4 Constraints

2.5 Assumptions and Dependencies

3. Specific Requirements

Appendix

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