

Software Design - Catch A Cab

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Chapter 1

Overview / introduction

How to hail a cab without a smartphone. //TODO short except on purpose
idea and scope

1.1 Overall description

//TODO

Chapter 2

Specific requirements specification

2.1 Functional Requirements

2.1.1 Functional requirement

Title: Person recognition

Description:

Dependency:

2.1.2 Functional requirement

Title: Determine propability that person is hailing for a cab

Description:

Dependency:

2.1.3 Functional requirement

Title: Hand detection

Description:

Dependency:

2.1.4 Functional requirement

Title: Handsign detection

Description:

Dependency:

2.1.5 Functional requirement

Title: Count number of fingers

Description:

Dependency:

2.1.6 Functional requirement

Title: Blacklist objects detection

Description:

Dependency:

2.1.7 Functional requirement

Title: Assign detected object to person

Description:

Dependency:

2.1.8 Functional requirement

Title: Call other cab if required

Description:

Dependency:

2.1.9 Functional requirement

Title: Detect distance between person and street

Description:

Dependency:

2.1.10 Functional requirement

Title: Recognize elderly, remember their faces and schedules

Description: Recognize patterns in person's ride schedules and show up on reoccurring times and places.

Dependency:

2.2 Non-functional Requirements

//TODO

2.3 activity and use case diagram

// TODO das, was Robin an die Tafel geschrieben hatte

2.4 External interface requirements

Chapter 3

Software architecture

3.1 Service oriented design

3.1.1 List of services

3.1.2 Interfaces

Welcher Service bekommt welche daten und returned welche daten in welchem Format?

3.2 Technology stack

1. Python 3
2. Open cv
3. Open vino
4. ros