System view

Project Kitchen Occupation

TSBB11 HT 2013

Version 0.1

Status

Reviewed	–	2013–09–24
Approved		

2013–09–24

Project Kitchen Occupation

Bilder och Grafik CDIO, HT 2013
Department of Electrical Engineering (ISY), Linköping University

Participants

Name	Responsibilities	Phone	E-mail
Mattias Tiger	Project manager	073–695 71 53	matti166@student.liu.se
Erik Fall	–	076–186 98 84	erifa226@student.liu.se
Gustav Häger	System integration	070–649 03 97	gusha124@student.liu.se
Malin Rudin	–	–	malru103@student.liu.se
Alexander Sjöholm	–	076–225 11 74	alesj050@student.liu.se
Martin Svensson	Documentation	070–289 01 49	marsv106@student.liu.se
Nikolaus West	Testing	073–698 92 60	nikwe491@student.liu.se

Homepage: nohomepage.asdf.asdf

Customer: Joakim Nejdeby, Linköping University, Origo 3154
Customer contact: 013–28 17 57, joakim.nejdeby@liu.se
Project supervisor: Fahad Khan, Linköping University, fahad.khan@liu.se
Examiner: Michael Felsberg, michael.felsberg@liu.se

Contents

List of Figures

Document history

Version	Date	Changes	Sign	Reviewed
0.1	2013–09–10	Initial draft	MS	
1.0	2013–05–24	Final Document	All	

1 Introduction

Text here.

1.1 About this document

Text here.

2 Project Overview

Text here.

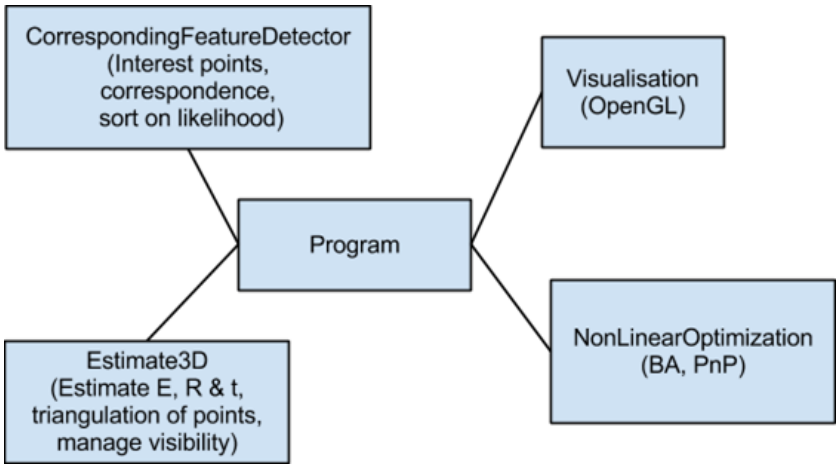

Figure 2.1: *Image of entire system and its modules (THIS IS AN EXAMPLE IMAGE)*

2.1 Main program

Text here.

3 Hardware

Text here.

3.1 Camera type

Text here

3.2 Camera placement

Text here

3.3 Platform

Text here

4 Network module

Text.

4.1 Camera API

Text here

4.2 Network communication

Text here

5 Image processing

Text here.

5.1 Software

Text here

5.2 Tracking

Text here

5.3 Counting people

Text here.

6 Estimation of waiting time

Text about this part of the system

6.1 Queue detection

Text here

6.2 Mathematical models

Text here

6.3 Machine learning (?)

Text here

7 User interface

Text about the UI and result presentation.

7.1 Presentation of results

Text here

7.2 Webpage

Text here

8 Installation program

Text about the different deliveries and deadlines

8.1 Milestones

Text here

8.2 Deliveries

Text here

References

[1] Sonka, M., Hlavac, V. & Boyle, R.
Image Processing, Analysis, and Machine Vision.
Toronto: Thompson Learning,
cop. 2008, 3rd ed.,
ISBN 0495244384.

[2] Lourakis, M.I.A.
levmar: Levenberg-Marquardt nonlinear least squares algorithms in C/C++
`http://www.ics.forth.gr/~lourakis/levmar/`,
Jul. 2004
Accessed on May 14th 2005.

[3] Manolis I.A. Lourakis
"Sparse Non-linear Least Squares Optimization for Geometric Vision,"
European Conference on Computer Vision,
vol. 2, 2010, pages 43-56
DOI `http://dx.doi.org/10.1007/978-3-642-15552-9_4`

[4] Hartley, R & Zisserman, A
Multiple View Geometry in Computer Vision.
Cambridge University Press, West Nyack, NY, USA
March 2003, 2nd ed.
ISBN 978–05–11–18711–7

[5] Nordberg, K
Introduction to Homogeneous Represenations and Estimation in Geometry
Apr. 2013
Computer Vision Laboratory, Department of Electrical Engineering
Linköping University