



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



HANAA ALY



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم



شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



HANAA ALY



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغييرات



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



HANAA ALY



AIN SHAMS UNIVERSITY
FACULTY OF ENGINEERING
Computer Engineering and Systems Department

A Robust Video-based 3D Head Tracking

A Thesis submitted in partial fulfillment of the requirements of
Master of Science in Electrical Engineering
Computer Engineering and Systems

by

Emad Wagih William Wassef

Bachelor of Science in Electrical Engineering
Electronics Engineering and Electrical Communications Department
Faculty of Engineering, Ain Shams University, 2012

Supervised By

Prof. Dr. Sherif Ali Mohamed Hammad

Professor Mechatronics Eng. Department,
Faculty of Engineering, Ain Shams University.

Dr. Maged Ghonema

Assistant Professor Mechatronics Eng. Department,
Faculty of Engineering, Ain Shams University.

Prof. Dr. Hossam Eldin Hassan Abd El Munim

Professor Computer and Systems Eng. Department,
Faculty of Engineering, Ain Shams University.

Cairo, 2021



AIN SHAMS UNIVERSITY
FACULTY OF ENGINEERING
Computer Engineering and Systems Department

A Robust Video-based 3D Head Tracking

by

Emad Wagih William Wassef

Bachelor of Science in Electrical Engineering
Electronics Engineering and Electrical Communications
Faculty of Engineering, Ain Shams, 2012

Advisors

Prof. Dr. Sherif Ali Mohamed Hammad

Professor Mechatronics Eng. Department,
Faculty of Engineering, Ain Shams University.

Dr. Maged Ghonema

Assistant Professor Mechatronics Eng. Department,
Faculty of Engineering, Ain Shams University.

Prof. Dr. Hossam Eldin Hassan Abd El Munim

Professor Computer and Systems Eng. Department,
Faculty of Engineering, Ain Shams University.



AIN SHAMS UNIVERSITY

FACULTY OF ENGINEERING

Computer and Systems Engineering Department

A Robust Video-based 3D Head Tracking

by

Eng. Emad Wagih William Wassef

Bachelor of Science in Electrical Engineering
Electronics Engineering and Electrical Communications
Faculty of Engineering, Ain Shams University, 2012

Examiners' Committee

Name and Affiliation

Signature

Prof. Dr. Aliaa Abdel-Halim Youssif

Professor and Dean of the Faculty of Computers and Information
Technology at the Arab Academy and Maritime Transport

.....

Prof. Dr. Mohamed Watheq Ali Kamel El-Kharashi

Professor Computer and Systems Eng. Department
Faculty of Engineering, Ain Shams University

.....

Prof. Dr. Sherif Ali Hammad

Professor Mechatronics Eng. Department
Faculty of Engineering, Ain Shams University

.....

Prof. Dr. Hossam Eldin Hassan Abd El Munim

Professor Computer and Systems Eng. Department
Faculty of Engineering, Ain Shams University

.....

Date: 27 November 2021

Statement

This thesis is submitted as a partial fulfillment of Master of Science in Electrical Engineering, Faculty of Engineering, Ain shams University. The author carried out the work included in this thesis, and no part of it has been submitted for a degree or a qualification at any other scientific entity.

Emad Wagih William Wassef

Signature

.....

Date: 27 November 2021

Researcher Data

Name: Emad Wagih William Wassef

Date of Birth: 01/04/1990

Place of Birth: Cairo, Egypt

Last academic degree: Bachelor of Science

Field of specialization: Electronics Engineering and Electrical Communications

University issued the degree : Ain Shams University

Date of issued degree : 2012

Current job : Principal Software Engineer

