

TECHNICAL UNIVERSITY OF CRETE

DIPLOMA THESIS

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# Design and Implementation of a Low Cost Embedded System for Localization of Drones Flying in Swarms

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TECHNICAL UNIVERSITY OF CRETE

# *Abstract*

School of Electrical and Computer Engineering

Electrical and Computer Engineer

**Design and Implementation of a Low Cost Embedded System for  
Localization of Drones Flying in Swarms**

by Christos SPYRIDAKIS

TODO: Add Abstract ...



# *Acknowledgements*

TODO: Add Acknowledgements



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# Physical Constants

Speed of Light  $c_0 = 2.997\,924\,58 \times 10^8 \text{ m s}^{-1}$  (exact)





# List of Symbols

$a$	distance	m
$\omega$	angular frequency	rad



# List of Abbreviations

MCU    MicroController Unit  
MPU    MicroProcessor Unit



*Dedicated to those people who have helped me be the  
person I am today...*



# Chapter 1

## Introduction

TODO

### 1.1 Motivation

TODO

### 1.2 Scientific Goals and Contributions

TODO

### 1.3 Thesis Outline

TODO

- Chapter 2 - Theoretical Background:
- Chapter 3 - Related Work:
- Chapter 4 - Design Features and Implementation:
- Chapter 5 - Applications and Usage Examples:
- Chapter 6 - Experiments and Results:
- Chapter 7 - Conclusions and Future Work:





## Chapter 2

# Theoretical Background

"Let no one ignorant of  
geometry enter"

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*Plato*



## Chapter 3

# Related Work

### 3.1 Thesis Approach

This should be the last section



## Chapter 4

# Design Features and Implementation

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## Chapter 5

# Applications and Usage Examples





## Chapter 6

# Experiments and Results



## Chapter 7

# Conclusions and Future Work

