

# Dedication

To those who work in  
silence for others,  
sake to my family, my  
parents, my friends,

my teachers and  
colleagues.

## Acknowledgement

I give all my thanks  
to my teachers who

helped me a lot, and  
my great thanks to  
Dr. Alaa Alsaffar  
Who paved the way  
for me.

And my great thanks  
to  
Dr. Ashraf Gasm  
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Who supervised me.  
I also extend my  
thanks and  
appreciation to  
Sudan University.

## ***Abstract***

*This project report presents the implementation and development of microcomputer interface to indicate positions of objects by GPS (Global Positioning System). The microcomputer interface use microcontroller and work based on multiplexer concept. The MCS family is used by microcontroller for control the microcomputer interface. It can receive in 8 channels data which is connected to GPS to indicate the position. The development program is written in assembly language*

*The microcomputer interface has one output signal for sending data to microcomputer that has function to indicate positions by each GPS. The part of display program is written in C –language, using MATLAB for simulation*

# مُسْتَخْلِص

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