

## الأية

بسم الله الرحمن الرحيم

قال تعالى يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَرْفَعُوا أَصْوَاتَكُمْ فَوْقَ صَوْتِ  
النَّبِيِّ لَا تَجْهَرُوا لَهُ فَتَكُونَ مِنَ الْكَاذِبِينَ  
وَأَنذَرْتُمْ لَا تُشْعِرُونَ ( صدق الله العظيم  
سورة الحجرات الآية (٢) .

## ***Dedication***

*This work is dedicated to:*

*My parents*

*My family*

*My friends*

*And all who supported me*

*And to you*

Noha

## Acknowledgement

First of all thanks to God for guiding me to conduct this study. I like to express my deep and great gratitude to my supervisor, Prof. Dr. Mubarak Dirar Abdalla, for his guidance, support and advice.

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## Abstract

The aim of this work is to investigate the algorithms of speech recognition .programmed and simulated the designed systems for algorithms of speech recognition in MATLAB. The simulation of programmed system in MATLAB is accomplished by using the microphone to record the spoken words. After raining the program in MATLAB,MATLAB will ask people to record the words threetimes; the first and second recorded words are different words which will be used as the reference signals in the designed system. The third recorded word is the same word as the one of the first two recorded words. After recording words, the words will become the signals' information which will be sampled and stored in MATLAB. Then MATLAB should be able to give the judgment that which word is recorded at the third time compared with the first two reference words according to the algorithms programmed in MATLAB. The results showed that the program can distinguish voices and recognize it.

## المستخلص

الهدف من هذا العمل هو تحقيق خوارزميه البصمة الصوتية للتعرف علي الكلام صممت خوارزمية النمذجة والمحاكاة بواسطة برنامج ماتلاب يسجل فيها الصوت بواسطة المكرفون بعد تشغيل البرنامج يطلب من المستخدم التسجيل لثلاثة مرات حيث التسجيل الاول والثاني كلمات مختلفة والتي تعتبر إشارات مرجعية وفي التسجيل الثالث (الكلمه المراد التعرف عليها) و هي إحدى الكلمتين السابقتين بعد إنتهاء التسجيل يقارن البرنامج بين كلمة التسجيل الثالثة مع الإشارتين المرجعيتين طبقاً لخوارزمية البرنامج في ماتلاب وقد بينت النتائج ان البرنامج يستطيع تمييز الاصوات و التعرف عليها .

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