

## ABSTRAK

Seiring dengan perkembangan jaman maka tugas manusia semakin berat dan banyak sehingga hampir semua orang membutuhkan bantuan untuk melakukan pekerjaannya dalam kehidupan sehari-hari. Awalnya manusia bergantung pada manusia lain untuk membantu pekerjaannya. yang disebut asisten. Namun manusia memiliki keterbatasan seperti waktu dan tenaga. Berdasarkan fakta tersebut manusia menciptakan alat yang diharapkan dapat mengatasi keterbatasan manusia tersebut yang disebut dengan asisten maya.

Asisten maya juga disebut *Virtual Assistant* merupakan topik yang hangat didiskusikan dan terus dikembangkan dalam bidang ilmu komputer. Asisten maya memungkinkan komputer memiliki kemampuan untuk mengerti bahasa natural manusia, bercakap-cakap, dan melakukan tugas asisten untuk membantu tugas manusia.

Alat tersebut akan diterapkan dalam rumah dan diharapkan dapat membantu memudahkan pekerjaan manusia sehari-hari di dalam rumah seperti menyalakan lampu, mematikan kipas angin, mengaktifkan dan me-nonaktifkan alarm, membuka dan mengunci pintu, memberitahu hari tanggal dan jam serta merespon pada perintah-perintah seperti *good night, good morning*.

Karena perintah yang diucapkan dalam Bahasa Inggris, asisten maya rumah tersebut akan diuji oleh beberapa orang dengan kemampuan Bahasa Inggris yang berbeda. Setiap perintah diuji dan menghasilkan tingkat keberhasilan respon perintah suara sebesar 75.3%.

Kata Kunci : Mikrokontroler, Asisten Maya, Pengendali Suara.

## **ABSTRACT**

*With the advancement of technology, nowadays humans' works are getting harder and more complicated until almost everyone need help to do their jobs in their daily lives. Humans depends on other humans to help their jobs, who are called assistants. But humans have limitations like time and energy. Based on that fact, humans created a tool to transcends human limitations called a virtual assistant.*

*Virtual assistant is a hot topic in the information technology communities, and always being developed in one way or another. The existence of virtual assistants make every computer has the ability to understand human languages, the ability to understand social interactions, and do myriads of assistant's jobs to help humans.*

*The tools will be implemented in houses and are expected to help humans in their everyday tasks concerning simple house chores; like turning on and turning off light sources, fans, alarm; closing and opening gates or doors, telling date and time, and responding to various custom commands like 'good night', or 'good morning'.*

*Because the commands are in English, the virtual assistant will be tested by a few other people with varying degrees of English skills. Each command is tested and produce 75.3% success rate of responses to voice-commands.*

**Keywords :** Microcontroller, Virtual Assistant, Voice Control.

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