ChatBots

Seminar Paper

Bio - Inspired Artificial Intelligence

Miguel Angel Robles Urquiza — Rafael Ruz Gomez

Matr.Nr. 7023522 — 7019703

migueurquiza@gmail.com — rafaroco96@gmail.com

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Abstract

In this paper we are going to do a research on the automatic learning of the ChatBots, focus in Sentimental ChatBots. First, we will study what is a ChatBot, studying its origins and seeing its applications. Once this is done, we will see what are the different types of ChatBots that exist today, seeing why we need them, how they work and their advantages and disadvantages.

Once we have introduced the different types of ChatBots that exist, we will establish similarities and differences in terms of structure, functionality and use between that ChatBots. We will also make an research of the ChatBots that because of their low usage and complex and not maintenance have become obsolete, an research of the ChatBots that are used to a greater extent nowadays and an research of the ChatBots that do not exist yet but we will need in our lives in a future.

Contents

1   Introduction

Let's start by defining what a chatbot is. *"Chatbots are computer programs that interact with users using natural languages."* [1]

En la seccion 1 hemos visto

The development of artificial intelligence is increasingly present in our lives, so we want to contribute to its continued growth. Many times we need someone to tell us something to make us feel better, someone to be with in bad times or someone to share happiness with. But if we do not have anyone to talk to and we do not want to be "alone" or "sad", what can we do? In this document, we propose a solution. We develop a sentimental chatbot whose objective is to detect the polarity of the feeling of a message. By using this chatbot, you can engage in a conversation that detects whether you are happy or sad, according to your messages and responds appropriately to your messages.

2   A Brief Review of ChatBots

In this doccument we're going to work with Python 2.7.13 as programming language, using the libraries **Pattern** and **Natural Language Toolkit**.

Pattern gives us the necessary tools to execute the sentimental analisys of the messages that the ChatBot receives. NLTK(Natural Language Toolkit) is going to help us to work with human language data.

3   Types of ChatBots

3.1   Sentimental-Chatbots

3.2   Information-Chatbots

3.3   Game-Chatbots

3.4   Assistant-ChatBots

4   Comparison of ChatBots

5   ChatBots in time

5.1   Obsolets

5.2   Nowdays

5.3   Future

References

[1] Bayan Abu Shawar and Eric Atwell. Chatbots: are they really useful? In *LDV Forum*, volume 22, pages 29–49, 2007.

[2] Bayan Abu Shawar and Eric Atwell. *A comparison between ALICE and Elizabeth chatbot systems.* University of Leeds, School of Computing research report 2002.19, 2002.