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# Intelligent Wallet

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A chatbot is a technology capable of simulating a human being conversation through a conversational interface. By the use of Artificial Intelligence (AI) and Machine Learning (ML) techniques, it automates the responses to a user through the exchange of messages in what the user perceives as natural language and executes tasks that are designed to transform the experience of the users.

Among diverse types of activities, users might be able to make a reservation at a restaurant, slide through the product carousels and make a purchase; be notified about canceling a flight to change the ticket at that precise moment and even trace the luggage; it also might be possible to learn how to trade and manage cryptocurrencies through chatbots.

In this paper a design for a cryptocurrency chatbot based on emotions is provided. It answers to queries related to trading and use the human interaction to recognize emotions and predict purchasing intents.

**Keywords**— chatbot, Artificial Intelligence, Machine Learning, Natural Language Processing, cryptocurrency, emotions

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# 1 Introduction

Now at days, numerous different web-based services such as e-commerce, e-business, e-learning, etc. are looking for different channels to aid their users. The way companies manage this virtual assistance and their relationship with customers, or as it could be called Customer Relationship Management (CRM), is usually among chat or phone support services. The more increases the demand, more increases the amount of client that must wait for help. Therefore, a poor client satisfaction is inevitable [1].

One of the aims of Computer Human Interaction (CHI) is to connect with users through instinctive and innate interaction approaches. Natural Language Processing (NLP) has been a wide applied method for this purpose; the user communicates to the computer what is perceived as natural human language and the system is not only able to infer what the user is trying to communicate but also to responds in the same way. [2] [3].

As result of the need of companies to provide additional services to their customers and the success of NLP, chatbots are positioned as main players of innovation. A chatbot is a technology that makes interaction between man and machine possible by using natural language and in the past few months, a hype about this topic has been developed [4]. According to Credence Research, chatbots are going to be a key piece of automation for 2019 and Gartner estimates that more than 85% of the service centers client, will be operated by bots in 2020 [5].

Chatbots are the result of an evolution of more than 30 years. The first conversational bot was Eliza, invented in the 1960s by the German Joseph Weizenbaum in the laboratory of Artificial Intelligence from the Massachusetts Institute of Technology (MIT), in U.S. It worked by looking for certain keywords; once a keyword or a tag was detected, ELIZA provided the corresponding response. [6]

In the 1990s, companies started to implemented telephone IVRs, systems of interactive voice response and in this decade, Richard Wallace developed ALICE. It uses Artificial Intelligence Mark-up Language (AIML) records; they are designed to store information for the chatbot similar an XML. [7]

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