Chatbots - keeping track of context

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***Abstract*—Nowadays chatbots become more and more sophisticated conversationalists, due to recent advances in the field. Chatbots are especially popular in handling customer service tasks. However it is crucial for a bot to be able to keep the context of a conversation. In this paper we give an overview over the different ways of contexts, the current state of the art in context tracking and we test a nerual network approach in an experiment, using the ubuntu dataset [1].**

I. Introduction

As the popularity of chatbots increases it becomes more important to increase their quality. This is why it is crucial for a chatbot to be able to keep track of the context. For example should the bot be able to know the nationality of the person using it or whether a person means his mother when saying "she" or his wife.

There are different types of context: The world knowledge(time, location, weather) , the user knowledge(relationships, preferences) and the dialogue context(Knowledge learned during the conversation), which is also called dialogue state. (need citation here?). In the following sections we give a brief overview over all those types. However our main focus will be on the dialogue context and the most common ways used to track it.

II. Types of context

A. Indian context

B. dialogue state tracking

III. Related work/ state of the art

A. statistical algorithms

B. machine learning

IV. Analysis of existing approaches

V. Neural network with ubuntu dataset

A. Idea

B. analysis

Subsection text here.

VI. Conclusion

The conclusion goes here. [**?**]

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[1] http://dataset.cs.mcgill.ca/ubuntu-corpus-1.0/