

Natural Language Processing with the Baxter Robot

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ABSTRACT

The aim of this project was to create a piece of software that can allow the user to input different commands to control Baxter. This can have applications in both manufacturing and consumer based fields. Baxter is a robot which consists of a body with two large arms, and a small head display with a screen and camera. There are cameras on the hands and one of joints.

The aim was to create a piece of natural language processing software which could be used to input a variety of commands which can be interpreted into Baxter code and run on Baxter. This piece of software can allow users to more easily communicate with Baxter and run Baxter programs. This can have applications in research and manufacturing which are Baxter's primary fields.

The software inputs a string, then, if it is a recognised command, the said sting is interpreted into a command, which then executes the relevant code on Baxter. The software consists of three main parts: The flat file word Database, the interpreter program, and the Baxter code Database.

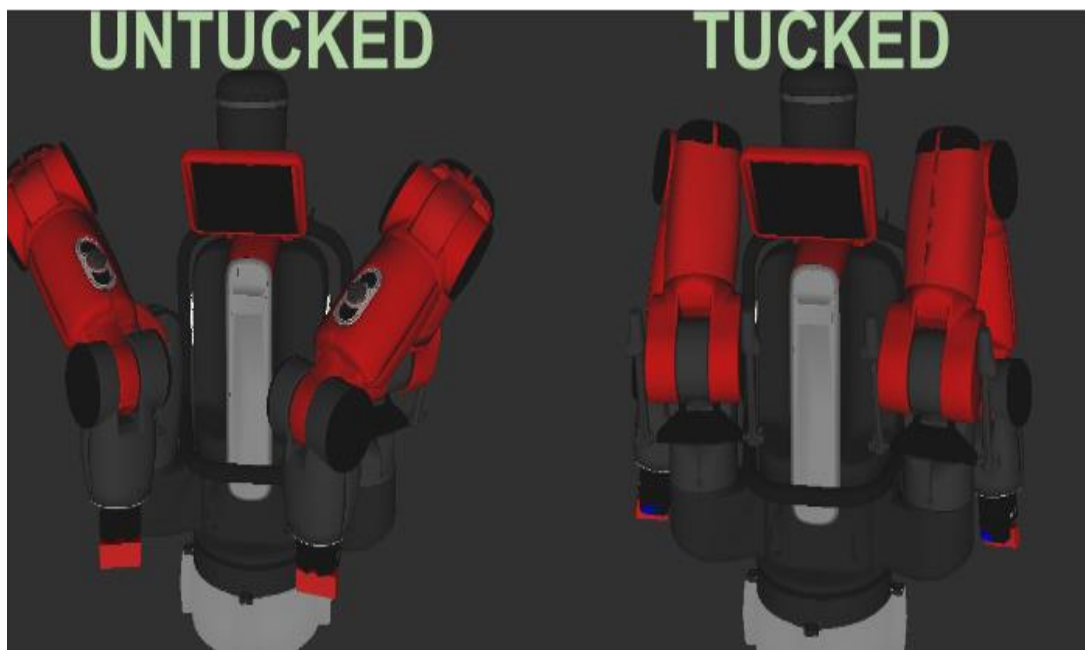


Figure 1. Baxter in his “tucked” and “untucked” positions

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