

Keyword and Named Entity Recognition on Online Text Data

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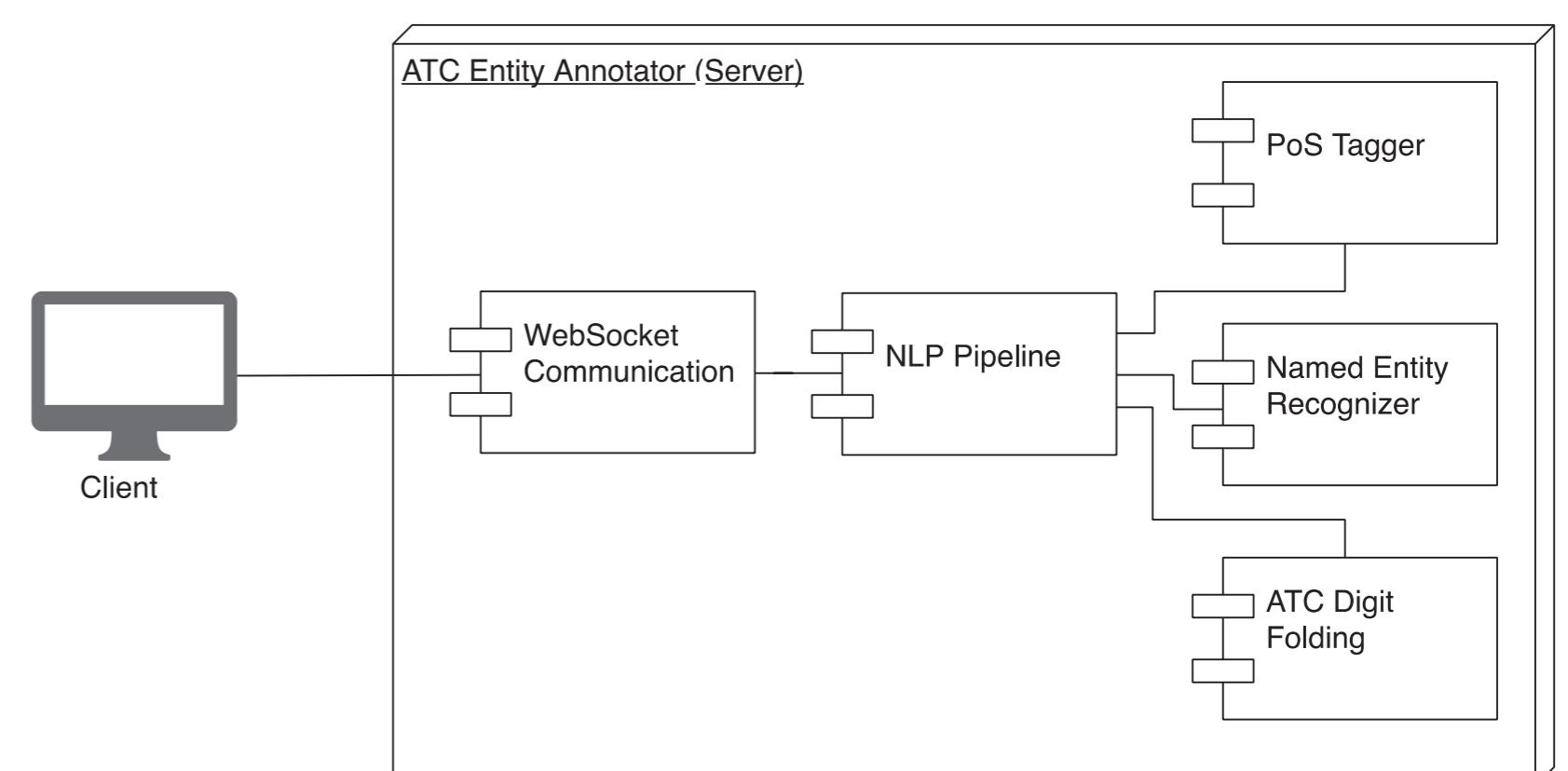
Overview

By recognizing and annotating the key information in conversations, we can help call center agents & air traffic controllers to alleviate the constant attention needed in actively listening for key information and in turn they can make decisions more confidently.

We explored on ways to recognize and annotate keywords in online air traffic control data. Keyword here is defined as **named entities** and **intent entities**. A service was developed to achieve this and its user interface was also developed to help visualizing the recognized keywords.

Solution

A service for annotating keywords in online air traffic control text data which works mainly with 3 components: **Parts-of-Speech tagger** for **intent entities** recognition, a **neural network** model for **named entities** recognition, and digit-folding module to convert numbers which are expressed in **words to digits**.



Example

singapore nine runway two zero center after the landing of firefly six zero you are cleared to land



singapore 9 runway 20 center after the landing of firefly 60 you are cleared to land

call sign
 runway
 action (intent)