Web-based Nationality Detection Tool for Natural Languages

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Background and Motivation

• Create the web interface for English and non-native English speakers to input their essays and give them advice on how to improve their writings
• Present the parse tree for sentences that a user inputs
• Required skills: JavaScript, jQuery, CSS and HTML (Frontend); Java (Backend)
• Improve the education of second language among non-native language speakers

Methods and Tools

Stanford Parser is an NLP tool to analyze the structure of sentences. We applied it and parsed each sentence into a parse-tree. Then the parse-tree is being processed into a key-value format object and converted into JSON data. Here is an example:

Input Sentence: “I am happy”.
Parsed JSON data is on the right.

Future Plan

• Write classifier to detect nationality of user
• Incorporate user’s feedback into the model
• Provide suggested sentence structure for the user to improve his/her writing

Reference


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