Bringing Knowledge Through Machine Learning and SMS

A dissertation presentation by

Sam Heather

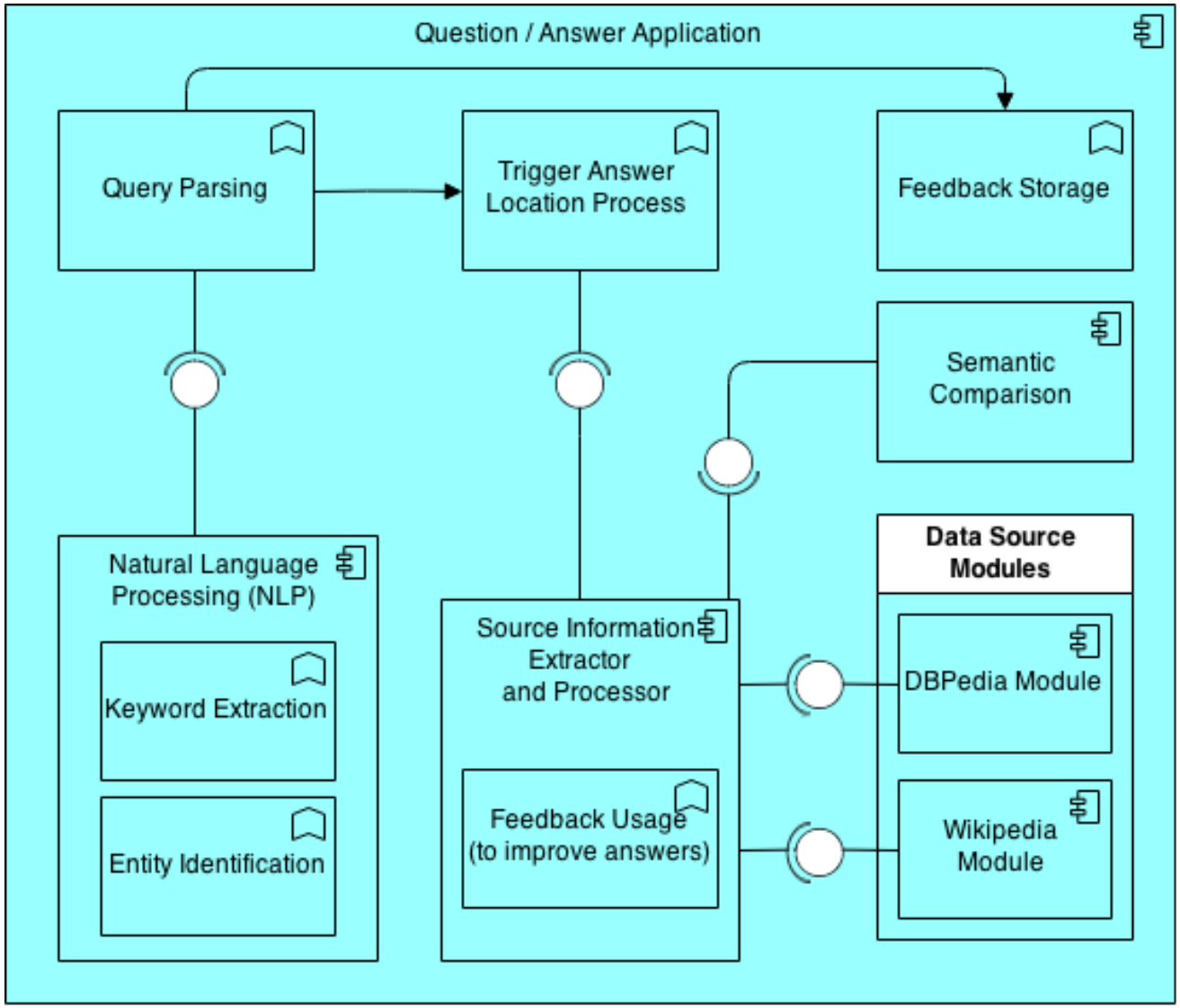
In this presentation

- Introduction
- Implementation and Challenges
- Experimental Evaluation
- Results
- Conclusions and Future Work
- Demonstration

Introduction

- What has been developed?
- Motivation
- Ethical Issues
- Goals of the Project

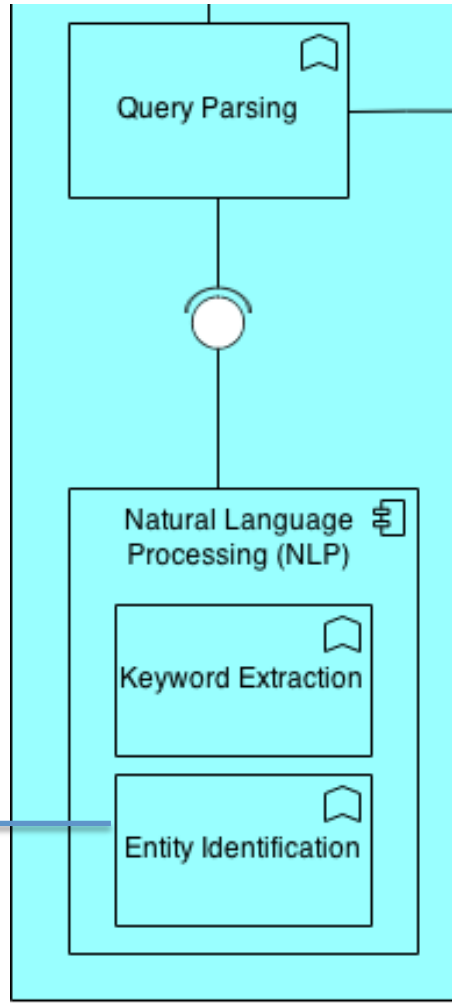
Implementation and Challenges



Implementation and Challenges

How tall is the Eiffel Tower?

"Eiffel Tower"



Entity Extraction Tool: https://dandelion.eu/products/datatxt/sim/

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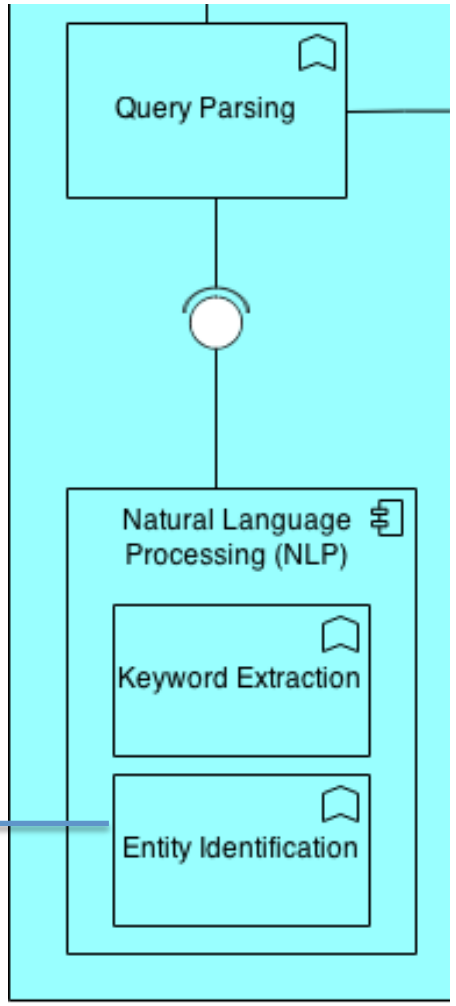

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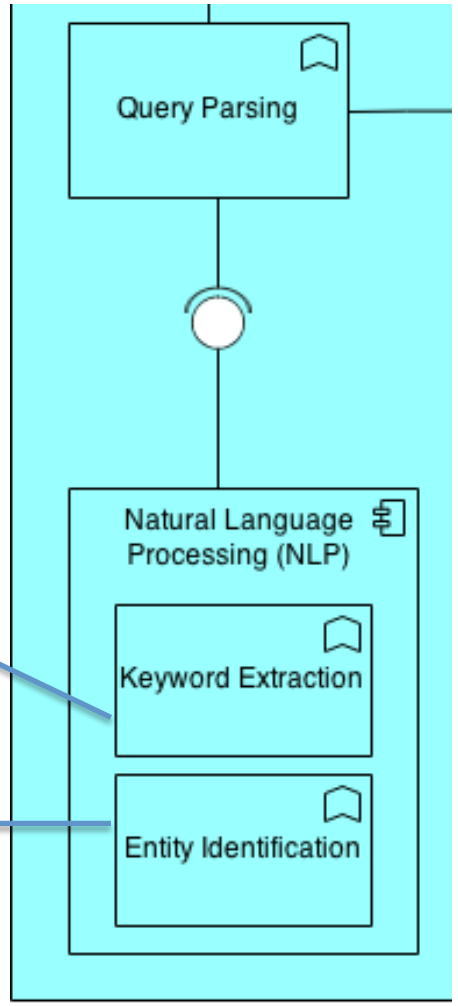

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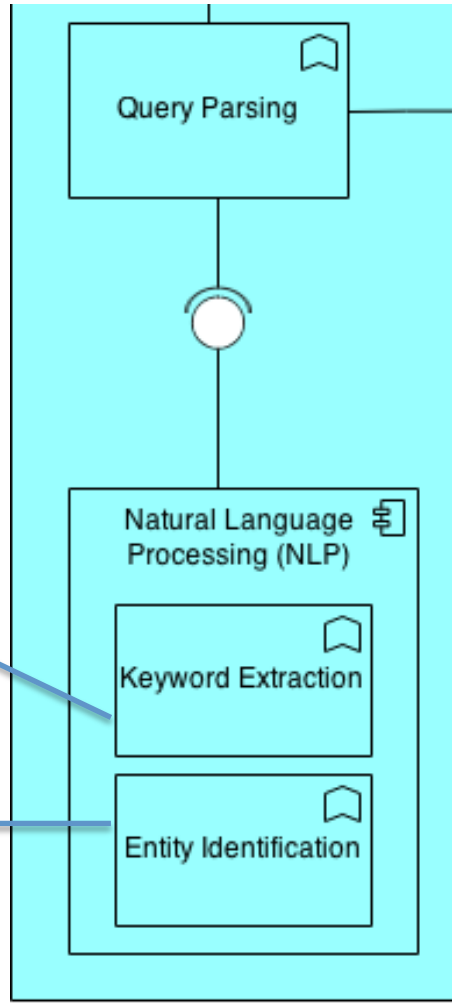

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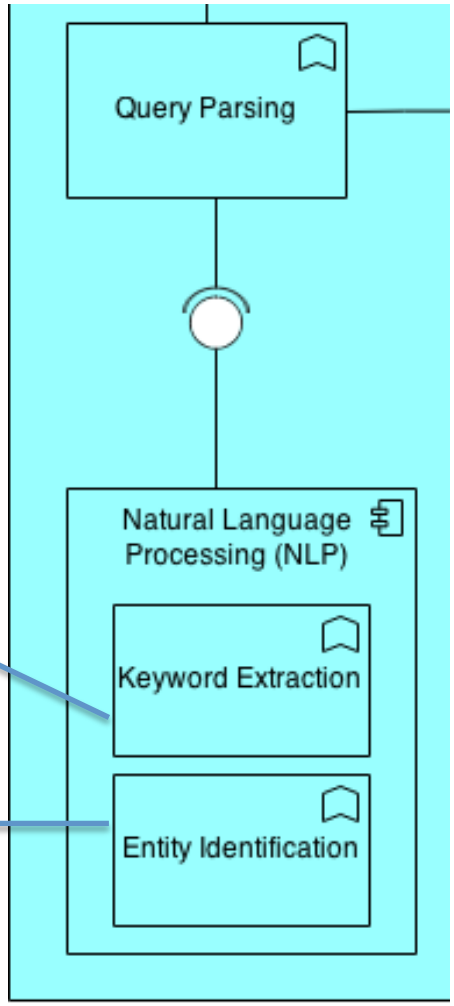
Implementation and Challenges

How tall is the Eiffel Tower?

"Eiffel Tower"

How tall is the Eiffel Tower?

{'property':'tall'
'place':'Eiffel_Tower'}



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Implementation and Challenges

{‘property’:’tall’
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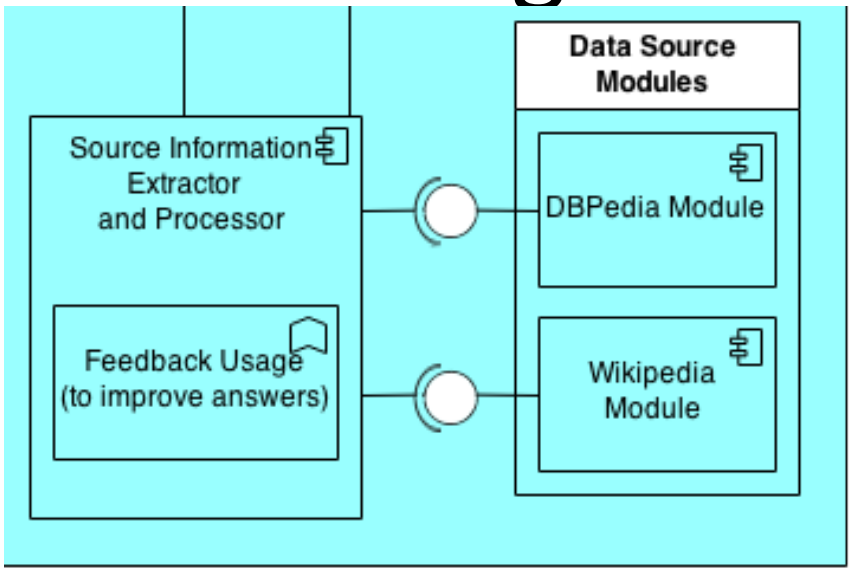

Key	Value	Similarity to ‘tall’
height_m	301	0.5
width_m	40	0.3
date_constructed	1887	0.2

Semantic Similarity Tool: http://api.cortical.io/Compare.htm

Implementation and Challenges

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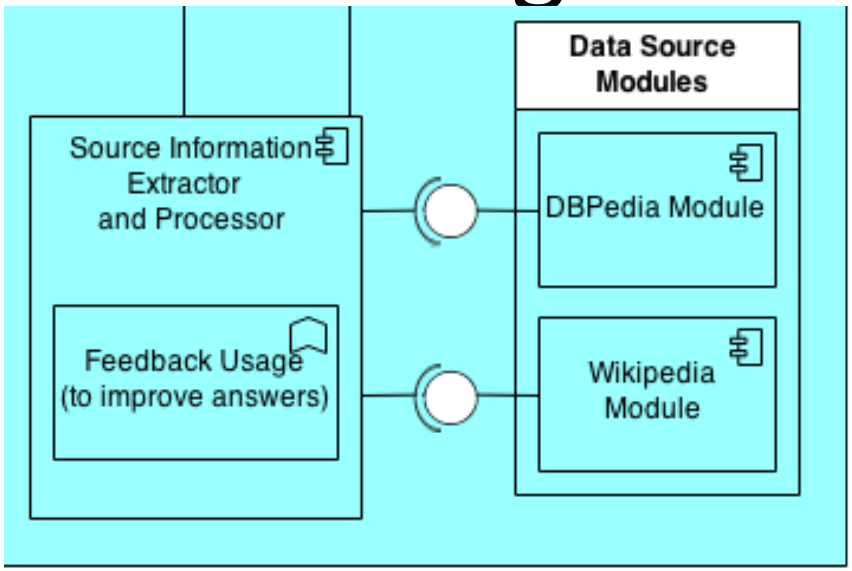

Key	Value	Similarity to ‘tall’	Adjusted Similarity
height_m	301	0.5	0.55
width_m	40	0.3	0.3
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Rating for tall-height relationship: [5,5]

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Implementation and Challenges

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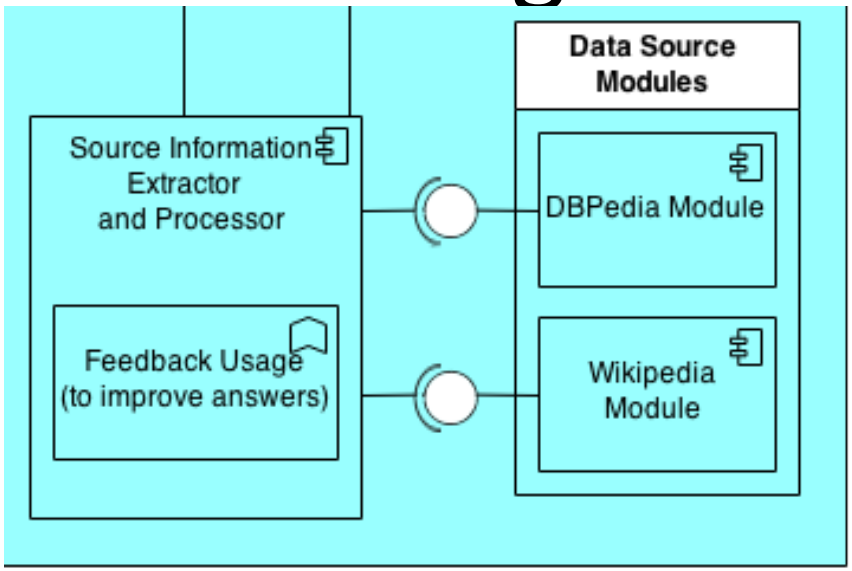

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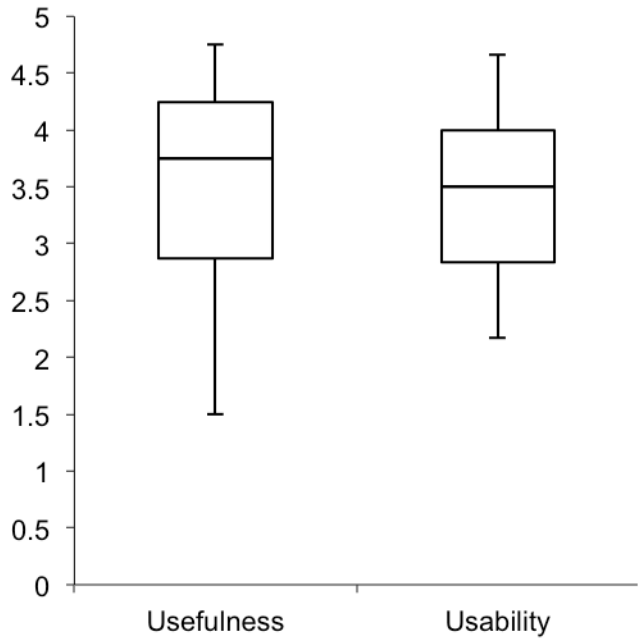
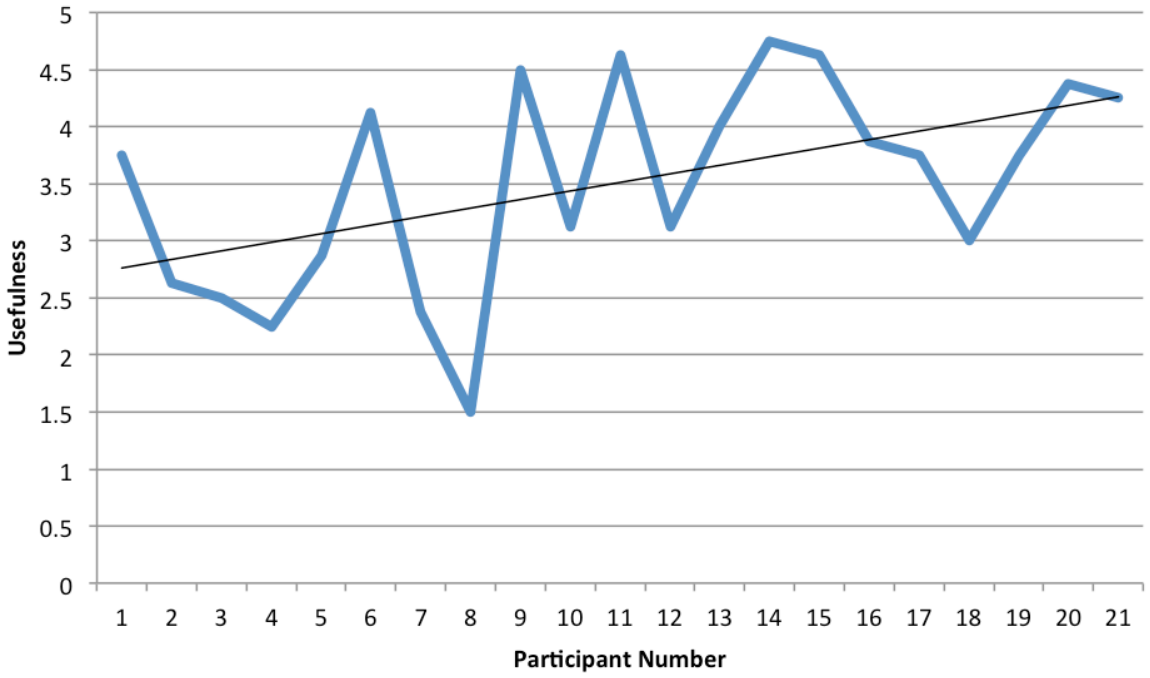
Experimental Evaluation

Experimental Evaluation





Conclusions and Future Work

Demonstration