# Concept Suggestor

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#### Abstract

This is the abstract.

Keywords: one, two, three

#### 1 Introduction

ATM is a cross-disciplinary field that requires analysts from multiple domains such as security, safety, and business. When discussing problems about the ATM field, analysts often create domain-specific models that employ both shared and domain-specific concepts. To facilitate these discussions it is important that domain-specific models from one domain can be used in communication with other domains. This can be done by ensuring that domains use similar concepts in their models where possible.

It is difficult for analysts from different domains to communicate about their proposed solutions to a given ATM problem. This difficulty is partially caused by a difference in concepts used in their modeling which reduces the usefulness of these models in communication with other domains.

### 2 Related Work

SpaCy is one of the fastest and most accurate publicly available Natural Language Processing (NLP) toolkits available.[1] SpaCy uses GloVe. GloVe is an unsupervised learning algorithm for obtaining vector representations for words.[2]

## 3 Algorithms

These are the algorithms.

## 4 Evaluation Methodology

• How to measure similarity in concepts used in the various domain-specific models?

- How to determine which are relevant concepts from other models that should be suggested to a modeler in order to improve the alignment between the models?
- How to determine which are relevant concepts from elsewhere that might improve alignment between the models?

### 5 Experiments

These are the experiments.

### 6 Conclusions

These are the conclusions.

### 7 Acknowledgements

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### References

- [1] Jinho D Choi, Joel R Tetreault, and Amanda Stent. "It Depends: Dependency Parser Comparison Using A Web-based Evaluation Tool." In: *ACL* (1). 2015, pp. 387–396.
- [2] Jeffrey Pennington, Richard Socher, and Christopher D. Manning. "GloVe: Global Vectors for Word Representation". In: *Empirical Methods in Natural Language Processing (EMNLP)*. 2014, pp. 1532–1543. URL: http://www.aclweb.org/anthology/D14-1162.