Implement Natural Language Processing for Word Embedding

Why Process Text?

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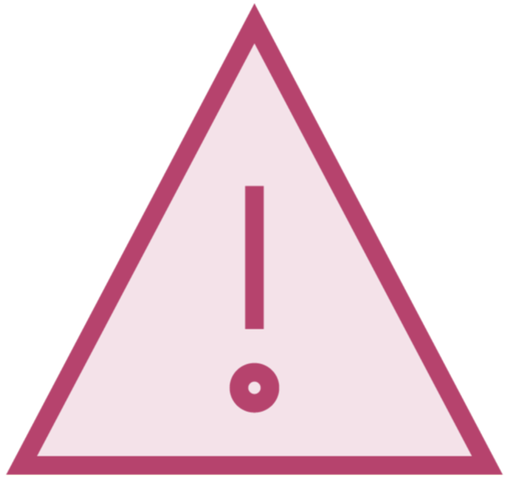
https://www.shutterstock.com/image-photo/nlp-natural-language-processing-neural-network-1911471991

Old NLP Paradigm

Three Main Problems

Language evolves



Curse of Dimensionality

Language similarity

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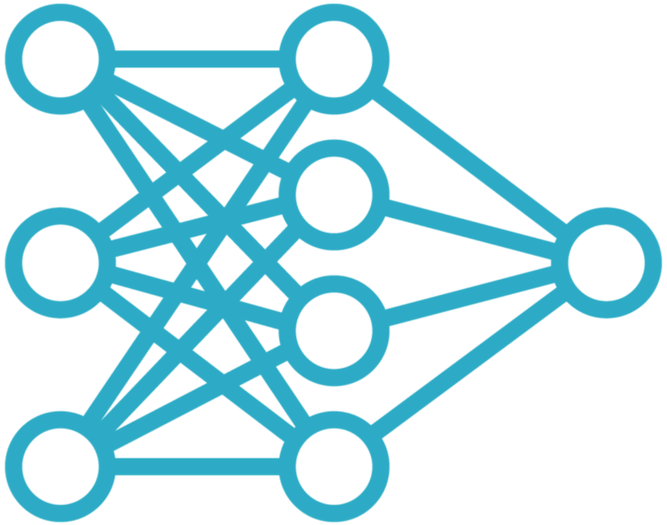
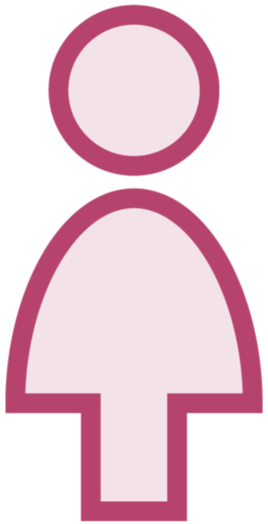
Globomantics Requirements



Get Fine-Tuned model

Provide visualisations



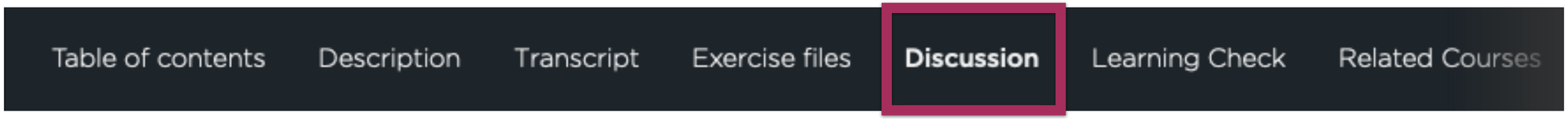
Detect gender biases

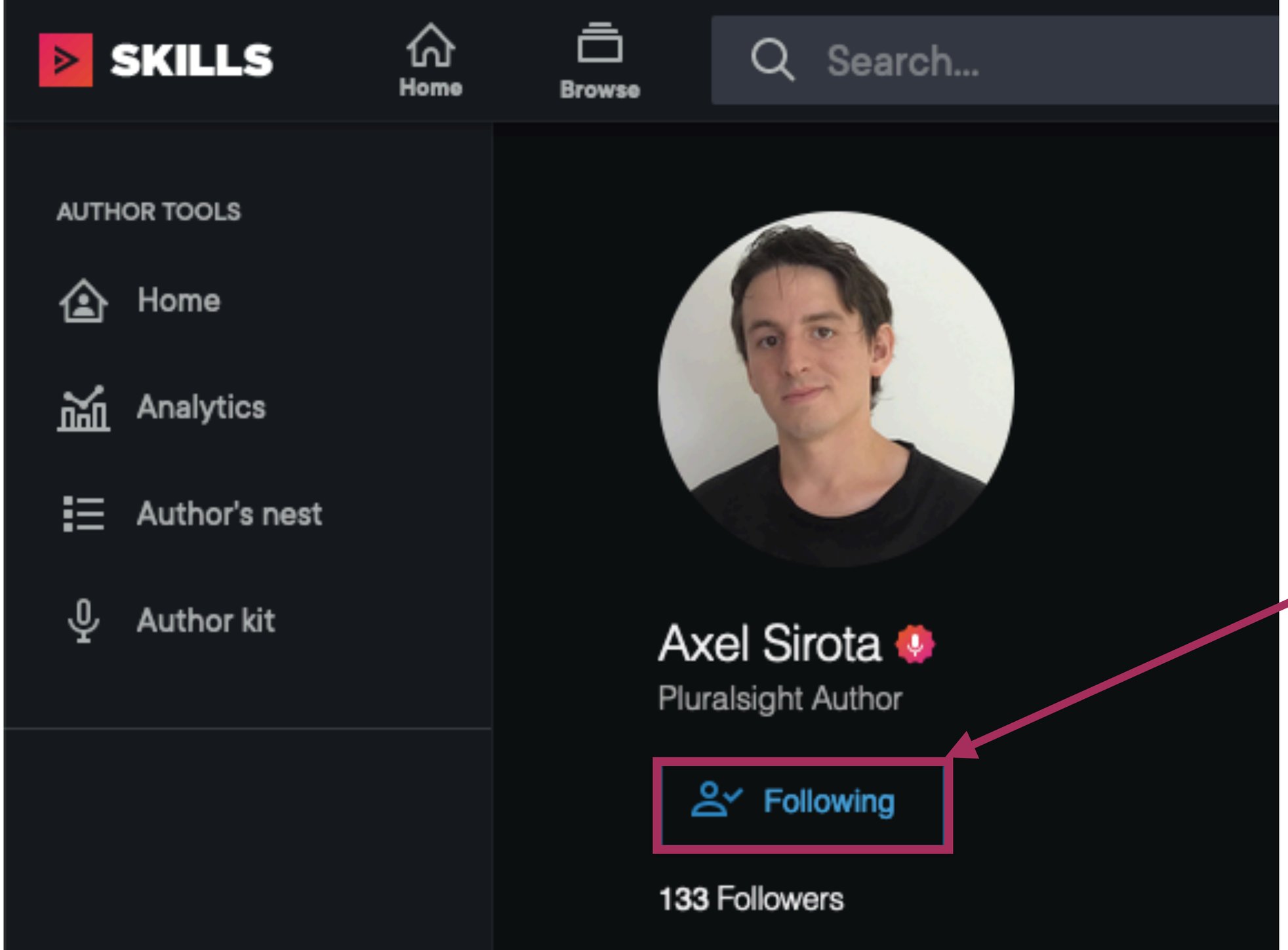
Getting the Best out of This Course

Prerequisites

Required	Course Suggestions	Not Needed
- Basics of Machine Learning - Basics of PyTorch - Basic Python	- Core Python 3.6: Getting Started - Foundations of PyTorch	- No NLP knowledge required

More Resources




SKILLS
Home
Browse
Search...
AUTHOR TOOLS
Home
Analytics
Author's nest
Author kit
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GitHub Repository for the Course

axel-sirota add all	`429f0d2` 11 hours ago	**4** commits
module3	add all	11 hours ago
module4	add all	11 hours ago
.gitignore	module 3 demos	3 days ago
LICENSE	Initial commit	4 days ago
README.md	Initial commit	4 days ago
requirements.txt	add structure	2 days ago
workspace.yml	module 3 demos	3 days ago

https://github.com/axel-sirota/implement-nlp-word-embedding/

This course sets you on track for any deeper course in NLP

Implement Natural Language Processing for Word Embedding

Version Check

Version Check

This version was created by using:

- Python 3.9
- PyTorch 1.11
- TorchText 0.11

All of which are the ones installed in **Google Collaboratory**

Version Check

This course is 100% applicable to:

- Python 3.6 and above
- PyTorch 1.8 and above
- TorchText 0.9 and above

If in doubt of compatibilities, please check https://pypi.org/project/torchtext/#Installation

Version Check

This course is 90% applicable to:

- Python 3.5
- PyTorch 1.0 to PyTorch 1.8 (not inclusive)

It will only change some utility methods from torchtext, which you can ask me if you are in such a situation.

Not Applicable

This course is NOT applicable to:

- Python 3.4 or below
- PyTorch strictly below 1.0

Outline of the Course

Training Word Representations

Predict sentiment with OHE

Train and predict with Word2Vec

Fine Tuning Word Representations

Fine Tune FastText and Glove

Visualise word clusters

Debiase word embeddings

Final Thoughts

Key Takeaways