

An AI for Computing Carbon Footprints



What's this all about?



VS.



VS.



VS.



What's this all about? (example)



VS.

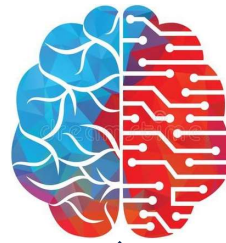


- paper (wood)
- bleach
- transportation
- ...

- electricity (source?)
- plastic + metal parts
- electronic parts
- ...

Envisioned Solution

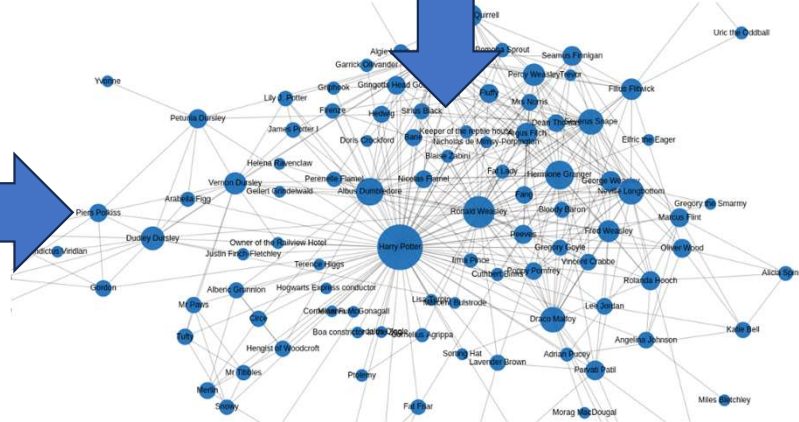
Inference Engine



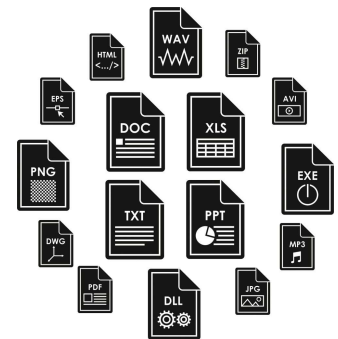
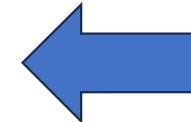
What is the carbon footprint of a (vegan) Schnitzel?



Users



Knowledge Graph



- Product databases
- Carbon footprint lists
- ...

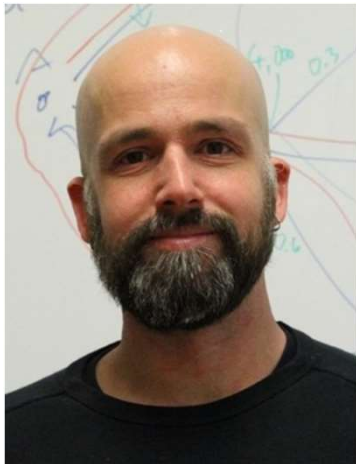
Heiko Paulheim, Franz Krause

Your Tasks & Challenges

- **Overall goal: Develop an AI that helps estimating carbon footprints**
- Select a Use Case
- Collect suitable data sources
- Combine them in a knowledge graph
- Add inference on top
- Develop UI/Query Interface
- Run Evaluation



Us...



Heiko Paulheim,
DWS



Franz Krause,
DWS

You...

- ...have attended a few AI related lectures, e.g.,
 - ...Knowledge Graphs (or acquired via self study)
 - ...Data Mining, Machine Learning,
Decision Support (would be a plus)
- ...are knowledgeable in programming
- ...want to work on a project with social impact!

