Informed Machine Learning – Towards a Taxonomy of Explicit Integration of Knowledge into Machine Learning

☰ Author	Christian Bauckhage Jannis Schuecker Jochen Garcke Laura von Rueden Sebastian Mayer
# Citations	19
⌐ Link	https://www.researchgate.net/profile/Christian_Bauckhage/publication/332109913_Informed_Machine_Learn _Towards_a_Taxonomy_of_Explicit_Integration_of_Knowledge_into_Machine_Learning/links/5caf2f12299bf12(Machine-Learning-Towards-a-Taxonomy-of-Explicit-Integration-of-Knowledge-into-Machine-Learning.pdf
⊙ Publisher	research gate
⊙ Snowballing	
☰ Status	
⊙ Tags	Reading
⊙ Type	Academic Paper
🗓 Year	@Mar 29, 2019

What did the authors try to accomplish?

- "informed machine learning" → theory-guided data science
- establish a taxonomy which can serve as a classification framework for incorporating domain knowledge

What were the key elements of the approach?

1. definition: informed machine learning
2. taxonomy and methodology
   - Which type of knowledge is integrated?
   - How is this knowledge represented or transformed (for the use on machine learning)?
   - Where is the knowledge integrated in the machine learning pipeline?

What parts can you use yourself?

- todo: read whole paper
- taxonomy, to classify different TGDS approaches and how to categorize them

What other references do you want to follow?

- follow literature classification table