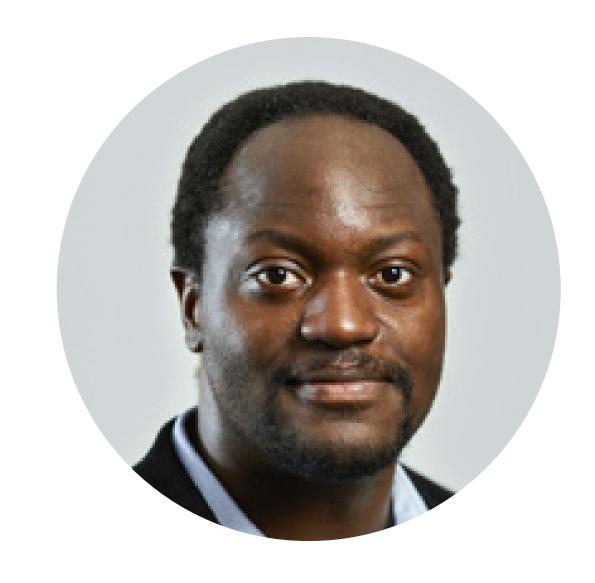


SCADS.AI PUBLIC COLLOQUIUM SESSION

Thu, Nov 24, 2022 | 15:30-17:00 @ ScaDS.Al Leipzig and online



Prof. Axel Ngonga, Paderborn University (Professor of Data Science, head of the DICE group)

Concept Learning with Multiple Representations

We address the problem of learning concepts in description logics at large scale in a supervised setting. This form of machine learning has a plethora of advantages. First, complex models can be learned from small training data sets by exploiting background knowledge. Moreover, the models computed in this manner are ante-hoc explainable. In this talk, we focus on approaches which improve the runtime of concept learning approaches by exploiting multiple representations. For example, we show how binary tensors can be used to improve graph storage and accelerate instance checks. We discuss current challenges faced by this family of approaches as well as some surprising experimental outcomes.

ScaDS.Al Leipzig Löhrs Carré Humboldtstraße 25, 3. Obergeschoss 04105 Leipzig

