

Interdisciplinary Machine Learning

Ulf Brefeld

Knowledge Mining & Assessment Group
TU Darmstadt, Germany
`brefeld@kma.informatik.tu-darmstadt.de`

Abstract. Interdisciplinary cooperations are sometimes viewed sceptically as they often involve non-standard problem settings and interactions with researchers and practitioners from other domains. Thus, interdisciplinary projects may require more dedication and engagement than working on off-the-shelf problems and downloadable data sets. In this talk, I will argue that machine learning is intrinsically an interdisciplinary discipline. Reaching out to other domains constitutes an important building block to advance the field of machine learning as it is the key to finding interesting and novel challenges and problem settings. Establishing an abstract view on such a novel problem setting often allows to identify surprisingly unrelated tasks that fall into the same equivalence class of problems and can thus be addressed with the same methods. I will present examples from ongoing research projects.

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