

Compression versus Accuracy: A Hierarchy of Lifted Models

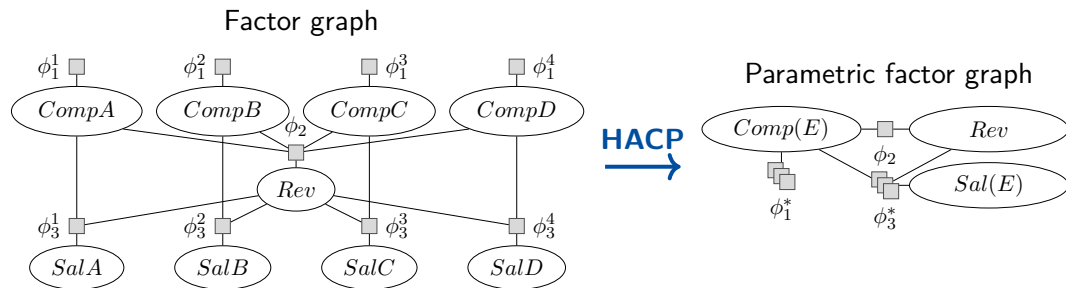
Jan Speller¹, Malte Luttermann^{2,3}, Marcel Gehrke³ and Tanya Braun¹,

¹Data Science Group, University of Münster, Germany

²German Research Center for Artificial Intelligence (DFKI), Lübeck, Germany

³Institute for Humanities-Centered Artificial Intelligence, University of Hamburg, Germany

Compression versus Accuracy: A Hierarchy of Lifted Models



- ▶ Introduction of **1DEED** as a practical tool for ε -equivalence ($\phi_3^1 =_\varepsilon \phi_3^2 \longrightarrow \phi_3^*$)
 - ▶ Consistency of ε -equivalent groupings
 - ▶ Hierarchical trade-off between compression ($\varepsilon \nearrow$) and accuracy ($\varepsilon \searrow$)
- ▶ Enables preanalysis of guaranteed theoretical error bounds ($p_{\max} \Delta$)
- ▶ Novel framework for hierarchical lifting