

Wim Martens - Graph data management

After giving a motivation of graph databases and an overview of the main data models, we will dive into foundational aspects of graph database query languages, with a strong focus on regular path queries (RPQs) and conjunctive regular path queries (CRPQs). We will consider the different semantics that graph database systems use for such queries (every path, simple path, trail), and we will look into the computational complexities of query evaluation and query containment.

After having gone through these foundations, we plan to do some excursions into connections between tree-structured and graph-structured data, adding data value comparisons, and aspects of real-life queries.