

# **Logic for reasoning about trees and words with data**

M. Praveen

We begin by examples of problems involving XML documents and see how they can be modeled using trees with data. We will then study how to solve these problems on XML documents using algorithms designed for solving logical problems on trees with data. This will provide us the motivation to study logics for data trees. We start with the simpler first order logics for data words and then extend to data trees. Time permitting, we will also study other logics on data words motivated by parallel programming.