In this thesis we address to the problematics of modelling user preferences. We discuss different views on user preferences as well as we give an overview of known models of user preferences and compare them. In more detail we introduce Fuzzy Logic Programming, Bayesian Logic Programming, Probabilistic Relational Models and Markov Logic Networks. For each model we propose transformations to other models and we show

possible utilizations in real world. Finally we present our suggestions how to extend and improve these models.