

Contents

1	Introduction	6
2	Fully Multimodal Journey Planning	6
2.1	Generalized Time-Dependent Graphs	6
2.2	Metaplanning-based Approach To Trip Planner Integration	8
3	Bicycle Routing with Realistic Route Choice Preferences	10
3.1	Formalizing Bicycle Routing as a Shortest Path Problem	10
3.2	Efficient Algorithms for Bicycle Routing	11
3.3	Evaluation and Results	12
4	Multi-agent Problems in Trip and Route Planning	14
5	Real-World Applications	16
6	Conclusions and Outlook	18
7	Ing. Michal Jakob, Ph.D.	23