

Multi-Vehicle Collision Avoidance via Reachability and Mixed Integer Programming

Mo Chen*, Jennifer Shih*, and Claire J. Tomlin

Abstract—

I. INTRODUCTION

- motivation – UAVs for civil purposes – difficult problem
- previous methods for dealing with multi-agent systems
- references – limitations (especially with respect to HJ formulation) —
- HJ background – references – limitations
- summary

II. PROBLEM FORMULATION

III. HAMILTON-JACOBI REACHABILITY

IV. MIXED INTEGER PROGRAMMING

V. RESULTS

VI. CONCLUSIONS AND FUTURE WORK

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* Both authors contributed equally to this work. All authors are with the Department of Electrical Engineering and Computer Sciences, University of California, Berkeley. {mochen72,cshih,tomlin}@berkeley.edu