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Robert Murphey, Don Grundel (Eds.)

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Editors

Dr. Michael J. Hirsch

Raytheon, Inc.
P.O. Box 12248
St. Petersburg, FL 33733 USA
Email: Michael_J_Hirsch@Raytheon.com

Dr. Robert Murphey

GNC Branch, Munitions Directorate
AFRL
101 W. Eglin Blvd., Ste. 331
Eglin AFB, FL 32542 USA
Email: Murphey@eglin.af.mil

Dr. Panos M. Pardalos

Department of Industrial and Systems Engineering
University of Florida
P.O. Box 116596
Gainesville, FL 32611 USA
Email: Pardalos@ufl.edu

Dr. Don Grundel

AAC/ENA
101 W. Eglin Blvd., Ste. 383
Eglin AFB, FL 32542 USA
Email: Don.Grundel@eglin.af.mil

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Preface

Optimal control of cooperative systems continues to be at the forefront of research initiatives in the military sciences. Recently, cooperative system research has expanded from the military domain to other engineering disciplines, including drug design and disaster recovery. While there exist many powerful techniques for optimal cooperative control problems, this area is still considered one of the most difficult in the applied sciences. Thus, there must be continual improvements and new insight directed to the modeling and analysis of optimal cooperative control problems. This present volume, as well as volumes from previous years, clearly illustrate novel solutions from some of the best and brightest optimal cooperative control researchers.

This volume represents the most recent in a series of publications discussing recent research and challenges in the field of optimal cooperative control. Most of the chapters in this book were presented at the Seventh International Conference on Cooperative Control and Optimization, which took place in Gainesville, Florida, January 31 – February 2, 2007. It is our belief that this book will be an invaluable resource to faculty, researchers, and students in the fields of optimization, control theory, computer science, and applied mathematics.

We gratefully acknowledge the financial support of the Air Force Research Laboratory, The Center for Applied Optimization at The University of Florida, and Raytheon, Inc. We thank the contributing authors, the anonymous referees, and Springer Publishing for making the conference so successful and the publication of this book possible.

Michael J. Hirsch
Panos M. Pardalos
Robert Murphey
Don Grundel

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