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# Hybrid Systems: Computation and Control

Third International Workshop, HSCC 2000  
Pittsburgh, PA, USA, March 23-25, 2000  
Proceedings



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# Preface

This volume contains the proceedings of the *Third International Workshop on Hybrid Systems: Computation and Control* (HSCC 2000), which was held on March 23-25, 2000, in Pittsburgh, Pennsylvania. The proceedings of the first two workshops in this series were published by Springer-Verlag, in the Lecture Notes in Computer Science series, as volumes 1386 and 1569.

The focus of the Hybrid Systems workshop series is on modeling, control, synthesis, design, and verification of *hybrid systems*. A hybrid system is a theoretical model for a computer controlled engineering system, with a dynamics that evolves both in a discrete state set and in a family of continuous state spaces. Hybrid systems research is motivated by, for example, control of electro-mechanical systems (robots), air traffic control, control of automated freeways, and chemical process control. The research area of hybrid systems overlaps both with computer science and with control theory. The workshop series is intended to foster the interaction between researchers from these fields in addressing problems in this new domain.

The scientific program of the workshop consisted of four invited talks and 32 contributed talks. The following researchers presented invited talks: K. Butts (Ford Research, USA), N. Leveson (MIT, USA), A. Sangiovanni-Vincentelli (U. California, Berkeley, USA), and B. Williams (MIT, USA). The contributed talks were based on the papers in these proceedings.

The program committee, chaired by the editors, selected the 32 contributed papers out of 71 submitted papers. The editors are grateful to the members of the program committee for their generous help in the reviewing and the selection process.

The editors are grateful to the speakers and all the other workshop participants, and to the sponsoring institutions whose support has made this event possible. Finally, they would like to thank George Woodzell for his system support, Drew Danielson for his help with local arrangements, and Joanne Talbot for all her hard work in assembling this proceedings volume.

March 2000

Nancy Lynch and Bruce Krogh

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