1999 CCA / CACSD MONDAY SESSIONS

Opening Remarks: 8:20 a.m. – 8:30 a.m. Monday, August 23, 1999

Hapuna Ballroom

Drs. Georg Gruebel, N. Harris McClamroch, and Akira Sano

Plenary I: 8:30 a.m. - 9:30 a.m., Monday, August 23, 1999

Hapuna Ballroom

Modelica - A Language for Physical System Modeling, Visualization, and Interaction

Dr. Hilding Elmqvist, President Dynasim AB, Lund, Sweden

	CACSD			CCA		
Track	1	2	3	4	5	6
Room	Koa	Milo	Mauka	Makai	Hau	Lehua
MA 10:00 - 12:20	Computational Tools for Modeling Uncertain Systems	Hybrid Systems and Real-Time Simulation	Automatic Code Generation for Automotive Applications	Metal Processing	Flight Control I	Integrated Design of Passive and Active Elements in Control Systems
MM 2:00 - 4:00	Numerical Methods for Systems	Object Oriented Modeling and Simulation	Automatic Code Generation	PID Control	Flight Control II	Micro Positioning
MP 4:20 – 6:20	Numerical Methods and Software	Fault Detection and Diagnosis	CACSD Learning via Internet	Combustion Dynamics and Control	Guidance and Control of Aerospace Vehicles	Motion Control

PANEL DISCUSSION: Monday, August 23, 7:00 p.m. - 9:00 p.m.

Mauka

Perspectives of Computer Aided Control System Design

1999 CCA / CACSD TUESDAY SESSIONS

Plenary II: 8:30 a.m. - 9:30 a.m., Tuesday, August 24, 1999

Hapuna Ballroom

Uncertainty, Complexity and Learning: Control Perspective

Professor Hidenori Kimura, University of Tokyo

	CACSD		CCA			
Track	1	2	3	4	5	6
Room	Koa	Milo	Mauka	Makai	Hau	Lehua
TuA 10:00 - 12:40	Computer Algebra in CACSD	CACSD Environments and Tools	Control of Chemical Processes I	Electric Motors I	Ship Motions and Offshore Structures	Mobile Robot and Vehicle Control
TuM 2:00 - 4:00	Design Methods	CACSD Tools in Flight Control	Neuro-Fuzzy Control of Chemical Processes	Electric Motors II	Control Applications In Aerospace Systems	Mobile Robot and Its Control Architecture
TuP 4:20 – 6:20	Optimization-Based CACSD	MaTX/RtMaTX: A Freeware for Integrated CACSD	Control Applications in Flows and Turbomachines	Applications of Adaptive Control for Systems with Nonsmooth Nonlinearities	Flight Control III	Inverted Pendulum Control

1999 CCA / CACSD WEDNESDAY SESSIONS

Plenary III: 8:30 a.m. - 9:30 a.m., Wednesday, August 25, 1999

Hapuna Ballroom

Convex Matrix Optimization Problems, with Applications in Control, Signal Processing, and Circuit Design

Professor Stephen Boyd, Stanford University

	CACSD		CCA			
Track	1	2	3	4	5	6
Room	Koa	Milo	Mauka	Makai	Hau	Lehua
WA 10:00 - 12:20	Evolutionary Computing in Control Engineering	Systems Engineering Methods for Powertrain Control Development	Chemical and Biological Processes	System Identification and Signal Modeling	Control Problems in Heavy-Duty Vehicles	Mechatronics I
WM 2:00 - 4:00	Intelligent CACSD	Applications of CACSD	Fault Detection and Isolation in Dynamical Systems	Network and Discrete Event Systems	Vehicle Suspensions	Control Integrity in Adverse Operating Conditions
WP 4:20 – 6:20	CAD & Monitoring	Intelligent Building Control	Control of Communication Networks	Manufacturing Systems	Nonlinear and Gain Scheduled Vehicles Control	Mechatronics II

1999 CCA / CACSD THURSDAY SESSIONS

Plenary IV: 8:30 am - 9:30 am, Thursday, August 26, 1999

Hapuna Ballroom

Control in the Automotive Industry: Accomplishments in the Twentieth Century,

Challenges in the Twenty-First Century

Dr. James Winkelman, Ford Motor Company

	CCA					
Track	1	2	3	4	5	6
Room	Koa	Milo	Mauka	Makai	Hau	Lehua
ThA 10:00 - 12:20	Flexible Structures	Scaled Control Experiments / Chemical Process Control	Control of Chemical Processes II	Fuzzy & Neural Network	Control of Automotive Systems	Robotics
ThM 2:00 - 4:00	Vibration Control and Input Shaping	Robust and Nonlinear Control of Magnetic Bearings	Process Control	Power Systems Control I	ABS and Adaptive Control	Robot Control
ThP 4:20 – 6:20	Motion and Vibration Control via Command Shaping	Control of Magnetic Bearings and Steppers	Control of Semiconductor Manufacturing Processes	Power Systems Control II	Automotive Control	Robot Manipulators