

3rd Workshop on Planning and Plan Execution for Real-World Systems

Principles and Practices for Planning in Execution

September 22th, 2007,
Providence, Rhode Island, USA
(ICAPS 2007)

Organization

Program Committee :

Mark Boddy	Adventium Labs, USA
Félix Ingrand (Co-Chair)	LAAS, Toulouse, France
Conor McGann	MBARI, USA
Paul Morris	NASA Ames, USA
Nicola Muscettola	Google, USA
David Musliner	Honeywell, USA
Frédéric Py (Co-Organizer)	MBARI, USA
Kanna Rajan (Co-Chair)	MBARI, USA
Radu Bogdan Rusu	TUM, Munich, Germany
Reid Simmons	CMU, USA
Vandi Verma	NASA Ames, USA
David Wettergreen	CMU, USA

Supplemental reviewers:

Michael Beetz	TUM, Munich, Germany
Dan Bryce	SRI International., USA
Richard Dearden	Univ. of Birmingham, UK
Ronny Hartanto	Univ. of Osnabrueck, Germany
Joachim Hertzberg	Univ. of Osnabrueck, Germany
Guillaume Infantes	Univ. of Maryland, USA
Sylvain Joyeux	LAAS, Toulouse, France
Christopher Loerken	Univ. of Osnabrueck, Germany
Florent Teichtel-Konigsbuch	ONERA, Toulouse, France
Gérard Verfaillie	ONERA, Toulouse, France
Shlomo Zilberstein	UMass, USA

Papers

— [23 submissions (3 reviews each)

— [17 accepted

— 10 longs : 20 min + 5 min,

— 7 shorts: 10 min

— [4 sessions

Panel Discussion

— [3 groups of papers and 3 corresponding discussion panels

— HTN, Semantic Knowledge, Cognitive Robotic Planning (Félix Ingrand)

— Architectures, New approaches (Dana Nau)

— Reasoning under Uncertainty (Gérard Verfaillie)

— [Get the authors and participants to compare and discuss their work.

Real World Planning

— [WS3 and WS7, the 2 most registered WS each day (despite their close topics and themes)

— [Sign of maturity of the field, or pull for getting planning in the real.

Program

Chair	Time	Paper	Author/Speaker	Duration
	8:30	Welcome and Introduction	F. Ingrand / F. Py	0:10
Session 1 Félix Ingrand	8:40	Towards a Plan Library for Household Robots	Armin Muller	0:10
	8:50	Active Execution Monitoring Using Planning and Semantic Knowledge	Lars Karlsson	0:25
	9:15	Coordinating Heterogeneous Agents to Synthesize Proactive Monitoring	Amedeo Cesta	0:25
	9:40	Duration Prediction for Proactive Replanning	Brennan Sellner	0:25
	10:05	HOTRiDE: Hierarchical Ordered Task Replanning in Dynamic Environments	Ugur Kuter	0:25
	10:30	Coffee Break		0:30
Session 2 Richard Dearden	11:00	Conditionalization: Adapting Forward-Chaining Planners to Partially Observable Environments	Dana Nau	0:25
	11:25	Discussion Panel 1 (HTN, Semantic Knowledge, Cognitive Robotic Planning)	Moderator Félix Ingrand	0:30
	11:55	A Formal Analysis Framework for PLEXIL	Vandi Verma	0:10
	12:05	Towards Probabilistic Plan Management	Laura M. Hiatt	0:25
	12:30	Lunch		1:30
Session 3 Vandi Verma	14:00	Interaction between reactive and deliberative tasks for on-line decision-making	Gérard Verfaillie	0:10
	14:10	A multi-thread decisional architecture for real-time planning under uncertainty	Florent Teichteil	0:25
	14:35	T-REX: A Deliberative System for AUV's	Frédéric Py	0:25
	15:00	Robust Execution of Qualitative State Plans for Agile Systems using Probabilistic Particles	Brian Williams	0:25
	15:25	Coffee Break		0:30
Session 4 Frédéric Py	15:55	Discussion Panel 2 (Architectures, New approaches)	Moderator Dana Nau	0:30
	16:25	Planning for AUVs: Dealing with a Continuous Partially-Observable Environment	Richard Dearden	0:10
	16:35	Model-Lite Planning: Supporting Dynamic User Objectives	Dan Bryce	0:25
	17:00	Monitoring Policy Execution	Christian Fritz	0:10
	17:10	Generating Plans in Concurrent, Probabilistic, Over-Subscribed Domains	Nilufer Onder	0:10
	17:20	Flexibly Integrating Deliberation and Execution in Decision-Theoretic Agents	David J. Musliner	0:10
	17:30	Discussion Panel 3 (Reasoning under Uncertainty)	Moderator Gérard Verfaillie	0:30
	18:00			