

Twenty-second International Joint Conference on Artificial Intelligence

> Barcelona, Catalonia (Spain) July 16 – 22, 2011



### Conference Theme: Integrated and Embedded Artifical Intelligence

- Special track at the conference on the theme
- 11 co-located conferences, workshops, and symposia, and a summer school
- Invited track of 49 best papers from sister conferences



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### **Conference Frequency**

- Growing number of requests to hold IJCAI in other parts of the world
- IJCAI Trustees are considering moving to an annual or 18-month rotation
- We will discuss the issue at the IJCAI Business Meeting on Thursday at 13:00
- Your input is welcome!

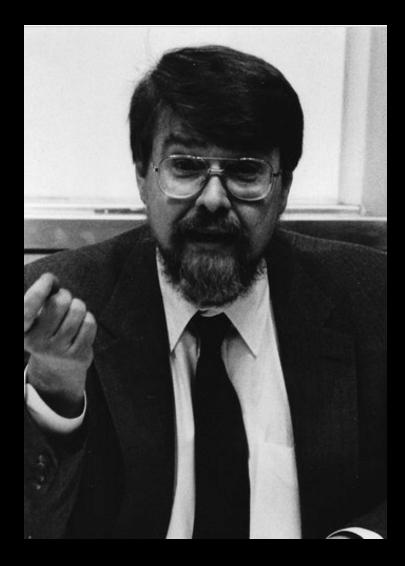


#### Ray Solomonoff





#### David Rumelhart

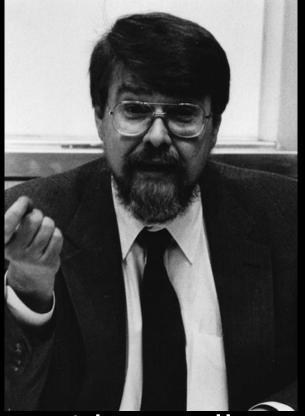


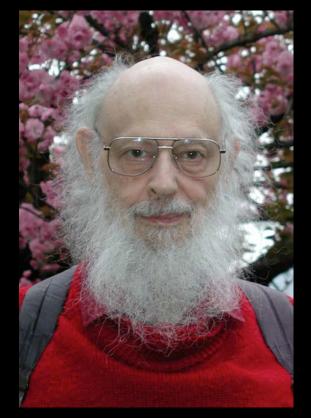


#### Sam Roweis











#### David Rumelhart Ray Solomonoff

Sam Roweis

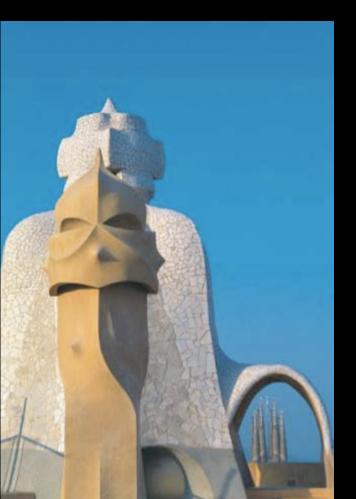


### Local Arrangements Chair

**Carles Sierra** 



### Welcome to Barcelona!







### Barcelona

- Top European metropolis in quality of life
- 6th most touristic city in the world
- 5th most preferred European city for business
- Large number of innovative centres
- High level of Entrepreneurship



### The LAC team





### Sponsorship



# Special thanks to Pablo Noriega!





### Architecture











### Creativity of Al researchers



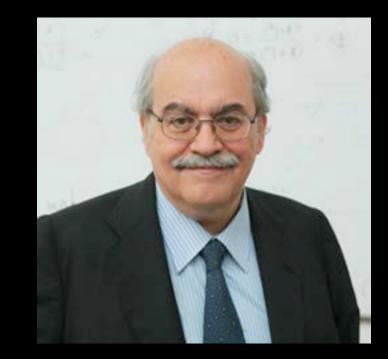






### Official welcome

- Professor Andreu Mas-Colell
- Minister of Economy and Knowledge
- Tomorrow at 8:30





### Free Things

- Tutorials
- Banquet
- Student reception
- Raffle
- Palau de la Música
- Industry day
- Farewell party



### Vice-president of ACIA

Beatriz López



# IJCAI 2011 Sponsors





### President of AEPIA

Antonio Bahamonde



# IJCAI 2011 Sponsors





### IJCAI President

Hiroaki Kitano



## IJCAI-11 Research Excellence Award Robert Anthony Kowalski



### Thursday, 6:20 pm, Plenary

# 

### IJCAI-11 Computer and Thought Award Vincent Conitzer Malte Helmert





Tuesday, 6:20 pm, Plenary

Tuesday, 7:05 pm Plenary



### IJCAI-11 Distinguished Service Award Raymond C. Perrault





### JAIR Editor-in-Chief

Shlomo Zilberstein



### IJCAI-JAIR Best Paper Prize

#### 2011 Prize

N. Nisan and A. Ronen (2007) "Computationally Feasible VCG Mechanisms" Volume 29, 19-47

#### 2011 Honorable Mention

A. Fern, S. Yoon and R. Givan (2006) "Approximate Policy Iteration with a Policy Language Bias: Solving Relational Markov Decision Processes", Volume 25, 75-118.



### Program Chair

**Toby Walsh** 



### Keynote talks

#### *Towards a Smarter Web* Wendy Hall

#### Designing Online Advertising Markets Susan Athey



Tu 9am



Wed 9am



### Invited talks

Rich Probabilistic Models for Image Understanding Daphne Koller



Sun, Surf & Automation: A Decade of Field Robotics in Australia Hugh Durrant-Whyte



Homo Heuristicus: Why biased minds make better decisions Gerd Gigerenzer



Adventures in Scheduling: Some trends in OR

#### **Mike Trick**

Open Information Extraction at Web Scale Oren Etzioni



The Games People Play Revisited Jonathan Schaeffer







### Best Paper track

- 49 talks + posters
  - Best papers from recent sister conferences:
    - AAMAS, ACM Recommender, CHI, COLT, CP, ECML PKDD, ECSQARU, ICAPS, ICCBR, ICLP, ISWC, IUI, JELIA, KDD, KR, LPNMR, RSS, RuleML SAT, SoCS, TARK, UAI and UMAP
  - JAIR 2010 & 2011 best papers
  - ECCAI 2010 thesis award



### Technical track

• 1325 submissions from 59 countries

- 227 talks + posters (17%)
- 173 posters (13%)
- Total: 400 papers (30%)
- Detailed statistics Tu 8.30am



### **Distinguished Papers**

• Selected by (subset) of Area Chairs

Nested Rollout Policy Adaptation for Monte Carlo Tree Search, Christopher D. Rosin

On the Decidability of Connectedness Constraints in 2D and 3D Euclidean Spaces, Roman Kontchakov, Yavor Nenov, Ian Pratt-Hartmann, Michael Zakharyaschev

Unweighted Coalitional Manipulation under the Borda Rule Is NP-Hard, Nadja Betzler, Rolf Niedermeier and Gerhard J. Woeginger



### Special track on: Integrated & Embedded AI

- Chair: Qiang Yang
  - 98 submissions
  - 13 talks + posters (13%)
  - 15 posters (15%)
  - Total: 28 papers (28%)



### Industry Friday

- Eric Horvitz, Microsoft
- Carlos Domingo, Telefonica
- Samy Bengio, Google
- Francoise Soulie, KXEN
- Marc Torrens, Strands
- David Gondek, IBM
- Ricardo Baeza-Yates, Yahoo!

Thanks to Nuria Oliver Industry Day Chair



### Video track

- Chair: Peter Stone
- 19 videos
  - Screened in coffee breaks
  - And in Room 111 from Tu to Thurs
- 4 finalists
  - Screened Tu 11.50 in Best Paper track
  - Vote for Best Video
  - Winner announced on Fri @ Farewell



### Ramon Llull session

- Catalan philosopher from 13<sup>th</sup> Century
  - Invented Borda and Condorcet voting
  - Major influence on Leibniz
- Thurs 4-6pm
  - Two keynotes and panel on Llull
- And a book in your registration bag!

Thanks to Carles Sierra



### Student participation

- Travel grants
  - AIJ/IJCAI >\$100,000 (139 participants, 29 countries)
  - Google \$1,800, NSF \$45,000
- Student reception
  - Thurs 7.30-8.30
- Doctoral consortium
  - Focus on ethics, all day Monday

Thanks to Maria Gini & Judy Goldsmith



### Other events

- Trading agent competition
  All day Tuesday
- General Game Playing Competition
  - Wed & Thurs
- Panel on Funding opportunities for international research
  - Wed 6.15pm
  - Representatives of NSF, EC, AFOSR & NICTA



### Social events

- Banquet
  Wed 7.30pm
- Student reception
  Thurs 7.30-8.30pm
- Farewell event
  - Fri 4.30-5.30pm
  - iPad and other goodies to raffle





### Instructions to authors!

- Talks
  - Arrive before the start of your session
  - Introduce yourself to chair
  - Speak for 17 minutes, leave 3 minutes for questions
  - Next speaker starts setting up computer in question time of previous speaker
- Posters

Set up before talks or during earlier break



### Thanks

- 32 Area Chairs
- 426 Senior PC members
- 1666 PC members
- 4000+ authors

# Shortlist for the NICTA Best PC & SPC awards

PC

Birte Glimm

Yevgeny Kazakov

Mantas Simkus

SPC David Aha Richard Booth Patrik Haslum



### Special thanks

- My wife & daughter
  - For giving me the time to put the Technical Program together





### Thank you

#### Spanish:

Queridos colegas y estudiantes, espero que este evento os sea provechoso

#### Catalan:

Gràcies per la vostra hospitalitat en aquesta ciutat meravellosa



### Up Next

- Casparo, fragments of an Opera
  - Composed by the AI researcher Luc Steels
  - Libretto by neuroscientist Òscar Vilarroya
- Following the opera, there will be food and drinks downstairs
- Please remain seated while we change the stage



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