

人 工 智 能

The ShanghaiAI Lectures

上 海 授 課



University of
Zurich^{UZH}



Swiss
Centre of Com-
in Research



WELCOME

The ShanghAI Lectures An experiment in global teaching

Today from the
Universidad Carlos III of Madrid
Spain

24 October 2013

欢迎您参与
“来自上海的人工智能系列讲座”

Today's program (CEST)

08:30 sites begin connecting (chat, screensharing, videoconference)

09:15 all sites are ready

09:30 START – Fabio : Welcome, content overview, goals

09:35 Rolf: On ‘Embodiment’

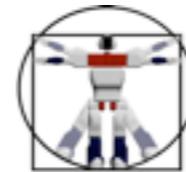
10:10 Coffee Break



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Today's program (CEST)

10:15 Josh Bongard: Evolution of Morphological Complexity

10:50 Pedro Lima: From Bio-inspired to Institutional inspired Collective Robotics

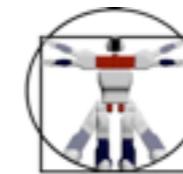
11:25 Wrap up



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How to interact

- raise your hand (if you are in a VideoC participating site)
- use the question board:
<http://shanghailectures.org/node/2740>
- use the Facebook page:
<https://www.facebook.com/shanghailectures>
- use Twitter:
tweets mentioning #SHAILE or @shanghailecture are listed

Table of contents

- **Intelligence – things can be seen differently**
- **Embodied intelligence**
- **Cognition and Embodiment**
- **Evolution – cognition from scratch**
- **Soft Robotics**
- **Bio-inspired robotics and technology**
- **Ontogenetic development: from locomotion to cognition**
- **Towards a theory of intelligence**
- **How the body shapes the way we think – summary, conclusions, outlook**
- **Special session on Community outreach and industry on Dec. 5th**

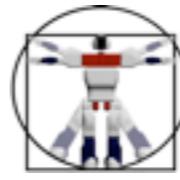
Welcome

to today's “ShanghAI Lectures”

24 October 2013



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On ‘Embodiment’

Rolf Pfeifer

Director of the Artificial Intelligence
Laboratory

‘Mr. Embodiment’ !

Inventor of the Shanghai Lectures series

Author of ‘How the body...’ and much
more

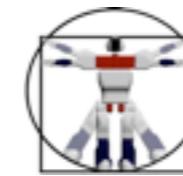
Crazy man!



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Evolution of Morphological Complexity



Josh Bongard

Professor at the University of Vermont

PhD from Rolf Pfeifer's AI at the University of Zurich (1999–2003),
Postdoctoral work with Hod Lipson at Cornell University (2003–2006)

Co-author of ‘How the body...’ and much more

**Received the Presidential Early Career Award
for Scientists and Engineers (PECASE) from
the U.S. government(2011)**



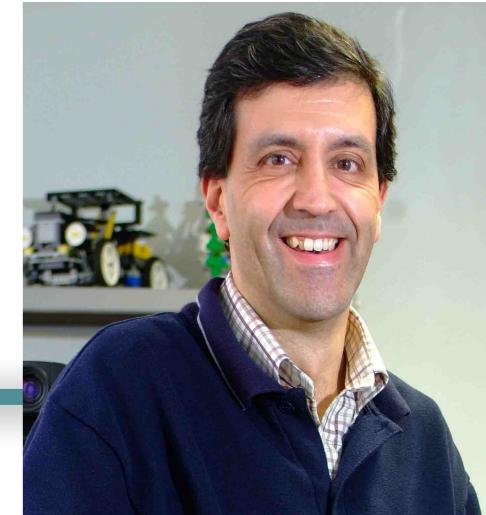
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From Bio-Inspired to Institutional-inspired Collective Robotics



Pedro Lima

Professor at the Instituto Superior Técnico, Universidade de Lisboa

Coordinator of the Intelligent Robots and Systems group at the Institute for Systems and Robotics

Former trustee of the RoboCup Federation (2003–2012)

Received the UC3M Chair of Excellence award in 2010

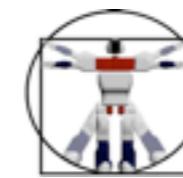
Discrete event models of robot tasks and planning under uncertainty, with applications to networked robot systems and more...



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End of session

the Kōans (the list of proposed topics for the group projects)

will be published on 30 October.

“A Kōan (公案) ... is a story, dialogue, question or statement which is used to provoke the "great doubt", and test a student's progress in Zen practice”

(Wikipedia)

End of session

Thank you for your attention!

stay tuned for lecture 3

“Cognition and Embodiment”

broadcasted from the University of Plymouth

