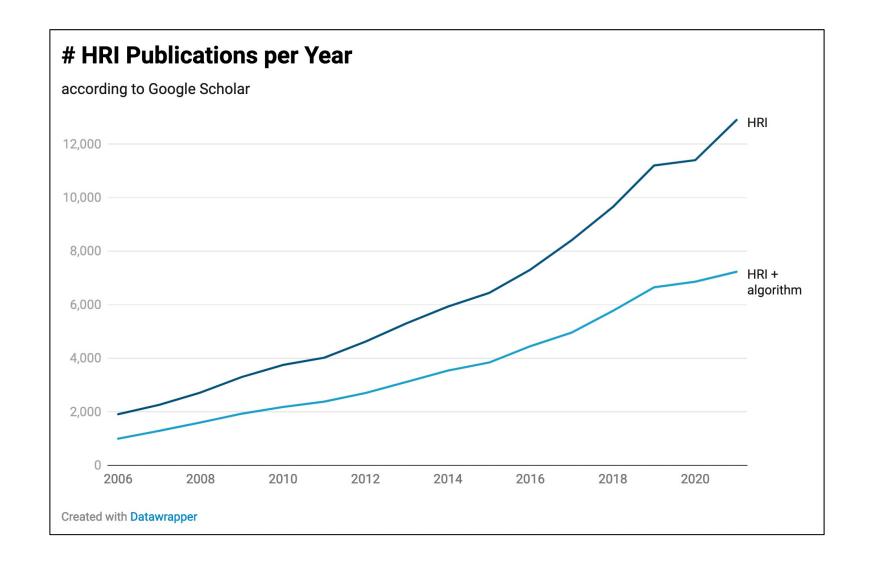
Reflections on AI-HRI

SONIA CHERNOVA



Brief History of the AI-HRI Symposium



HRI Conference Paper Sessions – 2006 and 2016

which is which?

Metrics and work study practices

Programming and OS issues in HRI

Situational awareness

Learning, adaptation and imitation in HRI

Assistive robotics

User studies

Cognitive science in HRI

Interface design and analysis

Dialog, mixed-initiative and multimodal interfaces

Assistive HRI

Human-Robot Collaboration

Morality and Trust in HRI

Teleoperation in HRI

Companionship & Engagement with Robots

Robots that Learn

Learning with Robots

Movement in HRI

Tools & Techniques for Social Robots

Attitudes and Responses to Social Robots

HRI Conference Paper Sessions – 2006 and 2016

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2006

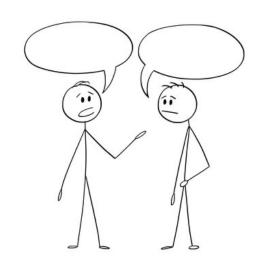
Assistive HRI
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Attitudes and Responses to Social Robots

2016

AI-HRI 2011

AI-HRI 2011



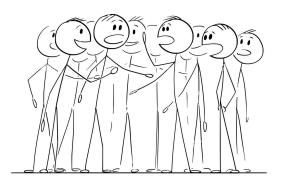


Communicating, Interpreting, and Executing High-Level Instructions for Human-Robot Interaction Nishant Trivedi, Pat Langley, Paul Schermerhorn, Matthias Scheutz

> Planning and Realizing Questions in Situated Human-Robot Interaction Ivana Kruijff-Korbayova

Toward Resilient Human-Robot Interaction through Situation Projection for Effective Joint Action Adrian R. Pearce, Liz Sonenberg, Paddy Nixon

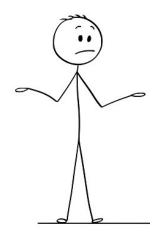
Towards Measuring Sharedness of Team Mental Models by Compositional Means Catholijn M. Jonker, Birna van Riemsdijk, Iris C. van de Kieft, Maria Gini



Tool Use Learning in Robots Solly Brown, Claude Sammut

AI-HRI 2011

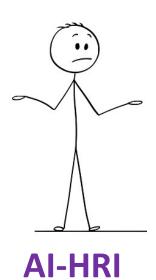






























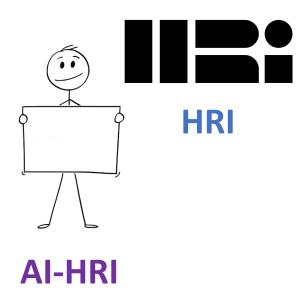














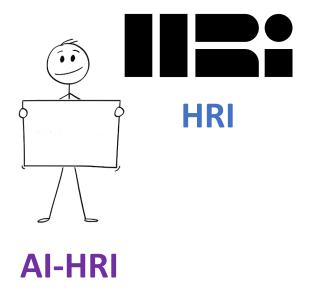


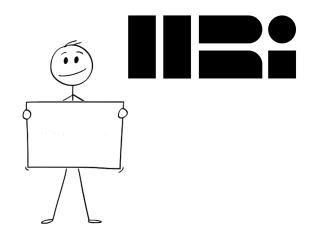












- Recruit bring back submissions from disillusioned researchers
- Change the reviewing structure:
 - Introduce conference submission themes
 - user studies
 - technical advances
 - interaction design
 - theory and methods
 - systems
 - Ensure fair and balanced reviewing practices
- Recognition for best paper in each category

HRI Conference Paper Sessions – 2021

Motion
Ethics & Trust
Perception
Teaching, Learning & Health
Theory & Methods
Games & Groups
Intent & Recovery
Design



Ethics

Collaboration

Communication

Cooperation

Reinforcement Learning

Explainable Al

Teaming

Trust

Task allocation

Human demonstrations



Human-Robot Interaction I-XI Learning-Based Human-Robot Interaction

Human-Robot Interaction: Teleoperation

Human-Robot Interaction: Task Planning

Human-Robot Interaction: Learning

Human-Robot Interaction: Robot Navigation I – II

Human-Robot Interaction: Medical Robots and Systems I – II

Human-Robot Interaction: Learning to Predict

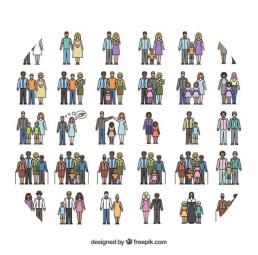
Human-Robot Interaction: Motion Planning

Human-Robot Interaction: Multimedia

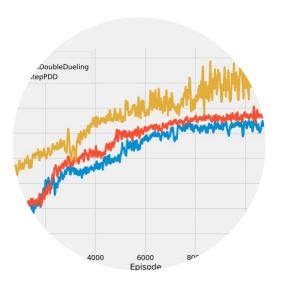
Human-Robot Interaction: Scheduling and Teleoperation

Human-Robot Interaction in Exoskeletons

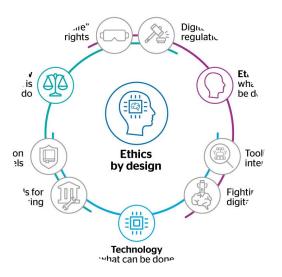
Moving Forward



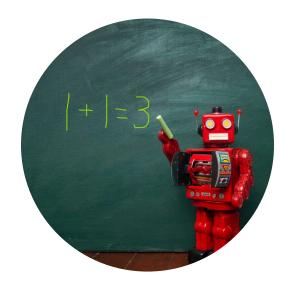
Support for Diverse User Base



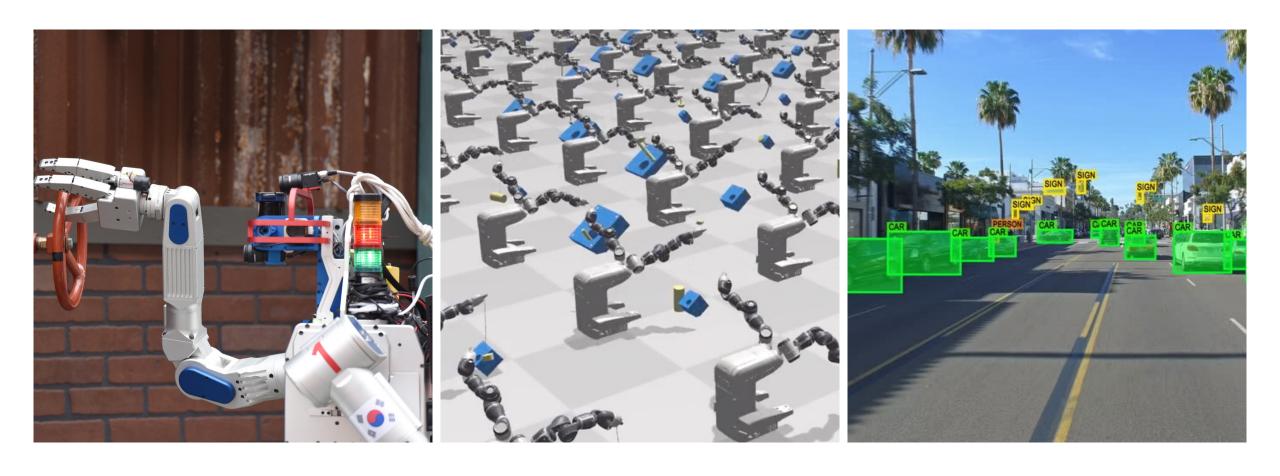
Sample-Efficient Learning Methods



Ethically-Guided Design Principles



Explainability,
Transparency and
Trust



Unsolved challenge: robust, reproducible evaluation practices