Sustained Emotionally coloured Machine-human Interaction using Nonverbal Expression

Fact Sheet

Project Information

SEMAINE

Grant agreement ID: 211486

Closed project

Start date
1 January 2008

End date
31 December 2010

Funded under
FP7-ICT

Overall budget
€ 3 602 849

EU contribution
€ 2 750 000

Coordinated by
DEUTSCHES FORSCHUNGSZENTRUM FUR KUNSTLICHE INTELLIGENZ GMBH

Germany

Project description

Cognitive Systems, Interaction, Robotics

The aim of the SEMAINE project is to draw together the current research on non-verbal signs and to produce a system that capitalises on them to achieve genuinely sustained, emotionally coloured interactions between a person and a machine. To do that, it develops an idea which was introduced in the FP5 project ERMIS and
pursued in HUMAINE. The idea is to build a 'Sensitive Artificial Listener', or SAL for short, which interacts with human beings in a shallow but emotion-rich way, using interactions observed in chat shows and at parties as a model. The verbal capabilities of such a system are very limited and superficial, similar to 'chatbots' from ELIZA on. Like them, it uses rules to respond to what a listener says without understanding the content in any depth. Unlike chatbots, however, a SAL system has sophisticated, robust, real-time multi-modal interaction capabilities – in an ongoing interaction, it detects the emotional colouring communicated by the user, and adapts its responses to that. In SAL, the system's responses are themselves emotionally loaded, and are chosen to propel the user towards an emotional state that the system currently 'wants' the user to be in.

Programme(s)

Topic(s)

Call for proposal

FP7-ICT-2007-1

Funding Scheme

Coordinator

DEUTSCHES FORSCHUNGSZENTRUM FUR KUNSTLICHE INTELLIGENZ GMBH

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Activity type

Research Organisations

EU contribution

€ 619 554

Website

Contact the organisation

Administrative Contact

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Participants (6)

TECHNISCHE UNIVERSITAET MUENCHEN
Germany
EU contribution

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Activity type
Higher or Secondary Education Establishments

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UNIVERSITE DE PARIS VIII VINCENNES A SAINT-DENIS

France
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Activity type
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CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS

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EU contribution

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Activity type
Research Organisations

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UNIVERSITEIT TWENTE

Netherlands
EU contribution
EU contribution

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Activity type
Higher or Secondary
Education Establishments

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IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE

United Kingdom
EU contribution

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Activity type
Higher or Secondary
Education Establishments

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THE QUEEN'S UNIVERSITY OF BELFAST

United Kingdom
EU contribution

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Activity type
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Education Establishments

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