Cognitive Workflow Capturing and Rendering with On-Body Sensor Networks

Fact Sheet

Project Information

Funded under
Specific Programme "Cooperation": Information and communication technologies

Total cost
€ 4 232 648,00

EU contribution
€ 3 232 177,00

Coordinated by
DEUTSCHES FORSCHUNGSZENTRUM FUR KUNSTLICHE INTELLIGENZ GMBH
Germany

Start date
1 January 2010

End date
31 December 2012

Closed project

Project description

Cognitive Systems and Robotics
System design to assist and interact with individual human activity, particularly that concerns with task solving and hand manipulation of objects and tools
The automatic capture, recognition and rendering of human sensory-motor activities represent essential technologies in many diverse applications. Current capture systems focus primarily on capturing raw motion data that is organised as
a single cinematic sequence, with little or no reference to the underlying task activity or workflow patterns exhibited by the human subject. The aim of the COGNITO project is to develop novel techniques that will allow cognitive workflow patterns to be analysed, learnt, recorded and subsequently rendered in a user-adaptive manner. COGNITO will map and closely couple both the afferent and efferent channels of the human subject, enabling activity data to be linked directly to workflow patterns and task completion. The focus will be on tasks involving the hand manipulation of objects and tools due to their importance in many industrial applications.

Fields of science

engineering and technology  >  electrical engineering, electronic engineering, information engineering  >  electronic engineering  >  sensors  >  smart sensors

Programme(s)

FP7-ICT - Specific Programme "Cooperation": Information and communication technologies

Topic(s)

ICT-2009.2.1 - Cognitive Systems and Robotics

Call for proposal

FP7-ICT-2009-4

See other projects for this call

Funding Scheme

CP - Collaborative project (generic)

Coordinator Contact

Coordinator
DEUTSCHES FORSCHUNGSZENTRUM FUR KUNSTLICHE INTELLIGENZ GMBH

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Trippstadter strasse 122
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Region
Rheinland-Pfalz > Rheinhessen-Pfalz > Kaiserslautern, Kreisfreie Stadt

Activity type
Research Organisations

Administrative Contact
Walter Olthoff (Dr.)

Links
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EU contribution
€ 903,988,00

Participants (8)

TECHNOLOGIE - INITIATIVE SMARTFACTORY KL EV

Germany

EU contribution
€ 273,075,00

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Research Organisations

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TRIVISIO PROTOTYPING GMBH

- Germany
- EU contribution: €391,960.00
- Address: Herzogenbuscher strasse 14, 54292 Trier
- Region: Rheinland-Pfalz > Trier, Kreisfreie Stadt
- Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
- Administrative Contact: Oliver Machui (Mr.)

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- Contact the organisation
- Website

CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS

- France
- EU contribution: €259,120.00
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Associação CCG/ZGDV - Centro de Computação Gráfica

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Activity type
Research Organisations

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UNIVERSITY OF LEEDS

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UNIVERSITY OF BRISTOL

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EU contribution

€ 607 410,00

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Region

South West (England) > Gloucestershire, Wiltshire and Bristol/Bath area > Bristol, City of

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UNIVERSITE DE TECHNOLOGIE DE COMPIEGNE

France

EU contribution

€ 74 725,00

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Hauts-de-France > Picardie > Oise

Activity type

Higher or Secondary Education Establishments

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UNIVERSIDADE DO MINHO
Portugal

EU contribution

€ 52 934,00

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Region

Continente > Norte > Cávado

Activity type

Higher or Secondary Education Establishments

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