



H2020 ICT 48 Network of Centers of Excellence
WP 2 Multi-Modal Perception and Modeling
KickOff/Organisation Meeting
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HumanE AI Net

KickOff/Organisation Meeting



Outline

- Network Overview

- Workpackage 2: Multi-Modal Perception and Modeling

- Collaborative Micro-Projects

 - Definition

 - Rules and Procedures

 - Examples

- Organisation of WP 2 Committee

- Planning for Next Meeting

HumanE AI Net

A Network of Centers of Excellence



Topic: Advanced Perception and Interaction with Humans.

Ambition: Humane-AI-Net will develop scientific foundations and enabling technologies for AI systems that can understand and assist humans, enhance human capabilities, and empower individuals and society as a whole.

Coordinator: Paul Lukowicz (DFKI).

A copy of the proposal is available at

<http://crowley-coutaz.fr/jlc/HumanE-AI-Net/HumanE-AI-Net-proposal.pdf>



HumanE AI Net

Funding: 12 M Euros for 36 months.

Approach:

- Five Workpackages devoted to scientific areas in Human Centric AI + Four Workpackages devoted to societal impacts.
- Each workpackage organised as a set of specialised “Topics”.
- Collaborative Micro-projects respond to research challenges defined in each workpackage
- Collaborative Micro-projects are proposed “bottom-up” by researcher and selected by each Work package committee
- Projects are selected and managed by the WP leader, assisted by a committee of topic leaders from the WP.



HumanE AI net Workplan

WP 1 Interactive Learning, Reasoning and Planning

WP 2 Multi-Modal Perception and Modeling

WP 3 Human AI Interaction and Collaboration

WP 4 Social AI

WP 5 AI Ethics and Responsible AI

WP 6 Applied research with industrial and societal use cases

WP 7 Innovation Ecosystem and Socio-Economic Impact

WP 8 Virtual Center of Excellence, Capacity building and Dissemination

WP 9 Synergies with AI on demand platform(s) and the Broader European AI Community

WP 10 Management and Governance



WP 2 Multi-Modal Perception and Modeling

Coordinator James Crowley (INRIA)

Partners: DFKI, ATHENA, CNR, CNRS, CU, INESC TEC, INRIA, JSI, ORU, SORBONNE, TUBITAK, TU WIEN, UCPH, UGA, ULEI, UNIBO, UNIPi, UCL, WARSAW, UOS, UVB

Topics (tasks):

- T2.1: Learning of multimodal models grounded in physical reality (DFKI)
- T2.2: Multimodal perception and modeling of actions, activities and tasks (INRIA)
- T2.3: Multimodal perception of awareness, emotions, and attitudes. (INRIA)
- T2.4: Perception of Social Signals and Social Dynamics (SORBONNE)
- T2.5: Distributed Collaborative Perception and Modeling (UNIPi)
- T2.6: Dealing with lack of labeled training data (DFKI)
- T2.7: Assembling benchmark datasets (SUSSEX)
- T2.8: Consolidation and coordination of the research agenda (INRIA)
- T2.9: Responsible Research and Innovation Assessment (RRIA) (INRIA)

Examples of Collaborative Micro-projects:

- (1) Narrative Description and Assistance for Kitchen Activities.
- (2) Challenge in computational behavioral analytics with AI and sensors.



Collaborative Micro-projects

Definition: A small group of researchers (2-5) from different organizations working together to provide a tangible result made available through the AI4EU platform.

Example Results: a data set, a software library, a software component, a paper, workshop with proceedings, an on-line Tutorial

Micro projects terminate with a presentation in a project meeting.

Duration: 1 to 6 months

Effort: 6 – 12 PMs (2 to 6 PM per partner)

Limit: 1 micro-project per person at a time.

Funding: Each partner organisation has 60K€ pre-allocated for Micro-projects.
(You do not have to be listed in a WP to propose a Micro-projects.)
When the pre-allocated funds are spent, the partner can request more.

2 M€ Open funding: 1 M€ for HAI partners, 1 M€ for third-parties



Collaborative Micro-projects

Each Work package will organize meetings to

- Report results of recent micro-projects
- Define challenges
- Brainstorm on possible micro-projects.

Initially we will concentrate on inciting micro-projects that use the pre-assigned funding at each partner for topics listed in the proposal.

In 2021 we will organize an open process to solicit proposals based on initial internal experiences with first batch.

Cross WP micro-projects are encouraged!



How to Propose a Collaborative Micro-project

- 1) Define the tangible output (to be up installed on the AI4EU platform)
- 2) Recruit your collaborators
- 3) Define roles, objectives and tasks for collaborators
- 4) Prepare a 1 page application form
- 6) Submit the proposal to a Work package Committee.

The best way to succeed is to brainstorm on possible projects at WP meetings.

Collaborative Micro-projects

Example 1: simple case



Example 1: Three WP 2 partners publish a Research Challenge and Data Set

Objective: AI4EU Resources:

- 1) Description of challenge problem with performance metrics
- 2) Data set for Test, Training and Evaluation

Budget: Partner 1: 3 Person month

Partner 2: 2 Person month

Partner 3: 1 Person month

Total: 6 Person Months Estimated Duration 6 months.

Budget is charged to Micro-project budget (60K) of each partner at accepted man-power rate. Maximum duration 12 months. (Only 1 micro-project per individual at a time).

Procedures:

- Micro-Project is proposed to WP2 Committee with 1 page proposal, Video pitch, and agreement by contact person for each of the partner organization by email.
- Micro-Project Approval within 1 month (typically 1 week).

Micro-Project completion certified by

- Upload of Challenge Description and Data set to AI4EU
- Video Presentation by partners at WP 2 monthly meeting
- Reimbursement from Partner Budgets of manpower costs declared on time sheets.

Collaborative Micro-projects

Example 2: Inter WP projects



Example 2: 2 partners from WP 2 and 3 collaborate to produce a software library

Objective:

AI4EU Software component and source code published on AI4EU web site

Budget: Partner 1: 6 Person month

Partner 2: 6 Person month

Total: 12 Person Months Estimated Duration 12 months.

Budget is charged to Micro-project budget (60K) of each partner at accepted man-power rate. Maximum duration 24 months. (Only 1 micro-project per individual at a time).

Procedures:

- Micro-Project is proposed to WP2 and WP 3 Committees with 1 page proposal, pitch
- Agreement by contact person for the partner organization by email.
- Micro-Project Approval by both WP committees

Micro-Project completion certified by

- Upload of and acceptance of AI4EU library
- Video Presentation by partners at WP 2 and WP 3 monthly meeting
- Reimbursement from Partner Budgets of manpower costs declared on time sheets.

Collaborative Micro-projects

Example 3: External Partner



Example 2: Hai Partner collaborates with non-HAI partner to compete in Research Challenge.

Objective: 1) Software source code for research challenge (on AI4EU platform)
2) Report describing algorithm and performance evaluation

Budget: Partner 1: 6 Person month
Partner 2: 6 Person month

Total: 12 Person Months Estimated Duration 12 months.

Partner 1 Budget is charged to Micro-project budget (60K) at accepted man-power rate.

Partner 2 is issued a contract by DFKI

Procedures:

- Micro-Project is proposed to WP2 Committee with 1 page proposal, Video pitch, and agreement by contact person for each of the partner organization by email.
- Micro-Project Approval requires HAI coordination team approval and contact person approval.

Micro-Project completion certified by

- Upload of Challenge Description and Data set to AI4EU
- Video Presentation by partners at WP 2 monthly meeting
- Reception of time sheets

What happens when partner budget is spent



(To be confirmed by Paul)

When a HAI partner's cumulative cost claims for micro-projects (man-power, equipment, travel) exceed 60K, the excess spending can be covered by the 1 M Euro reserve for partners. In this case, the partner contact person should contact the coordinator and request authorisation (and if needed, a contract amendment).

This is why authorisation by the partner contact person is required for Micro-projects!

Draft Application (under discussion):

<u>HumanE AI Net Micro-Project Report Form</u>
<u>Title:</u>
<u>Description of Results</u> <i>(5-10 lines)</i>
<u>Task(s) involved</u> : number (s) and title (s) as specified written in the proposal
<u>Partners and actual effort</u> (as will be claimed from the EU) <i>Partner 1:</i> Name, actual effort in PMs <i>Partner 2:</i> Name, actual effort in PMs <i>Partner N:</i> Name, actual effort in PMs
<u>External partners (if applicable)</u> What was the impact of the external partner, what costs were reimbursed how. 5-10 line
<u>Tangible output.</u> Bullet list, 1-2 lines per output (e.g. paper in, toolset, data set, demo, tutorial etc.), including how it is available from where
<u>Approval / remarks of WP leader(s).</u>



Formation of WP 2 Committee: Call for Candidates

Committee composed of one participant for each WP topic.

Partner organisation are listed in Proposal. Now we need actual names.

Priority for organisations listed in the proposal.

WP 2 Topic:

T2.1: Learning of multimodal models grounded in physical reality (DFKI)

T2.2: Multimodal perception and modeling of actions, activities and tasks (INRIA)

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T2.9: Responsible Research and Innovation Assessment (RRIA) (INRIA)



WP 2 Monthly meeting date

Expect 2 hour meeting composed of

- 1) Humane AI Net organisational news (news from coordination team)
- 2) Presentation of any completed Projects
- 3) Proposals for new micro-projects
- 4) Requests for partners for micro-projects
- 5) Any other business.

First meeting in next 4 weeks – after we will choose a regular da

Please Complete the poll at :

<https://framadata.org/JGe7h6reEg276lfK>