



HELIOS: A Context-aware Distributed Social Networking Framework

Results

Project Information

HELIOS

Grant agreement ID: 825585

[Project website](#)

DOI

[10.3030/825585](#)

Project closed

EC signature date

21 November 2018

Start date

1 January 2019

End date

28 February 2022

Funded under

INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Information and Communication Technologies (ICT)

Total cost

€ 4 999 601,25

EU contribution

€ 4 999 601,25

Coordinated by

TEKNOLOGIAN

TUTKIMUSKESKUS VTT OY



Finland

CORDIS provides links to public deliverables and publications of HORIZON projects.

Links to deliverables and publications from FP7 projects, as well as links to some specific result types such as dataset and software, are dynamically retrieved from [OpenAIRE](#) .

Deliverables

[Define rewarding methodologies](#)

Methodologies to reward users' activities in the social network.

[Trial report](#)

Reporting project trials unsupervised real life validation in closed controlled conditions throughout the project

[Development of content-aware social graphs](#)

Principles and practices to build content-aware social graphs

[Final legal report](#)

A final report of legal issues touched by the project delivered as a feedback to the regulatory process

[Lab test report](#)

Reporting lab tests evaluation of technologies and services developed throughout the project

[Data Management Plan, final version](#)

Data Management Plan final update

[Final system architecture and API specification](#)

System architecture specification, covering overall architecture and a basic set of HELIOS core API's.

[Dissemination Final Report](#)

Final dissemination report

[Validation operation plan](#)

Procedures for a coordinated validation.

[Heterogeneous Social Network Graph topology and lifecycle](#)

Report of Heterogeneous Social Network graph studied (HSN)

[Data Management Plan, M18 update](#)

Data Management Plan, mid-term update.

[Technical Requirements Gathering](#)

Technical requirements for the overall project comprising peertopeer architectures decentralized centralized and hybrid storage IoT and Smart Space sensor detection trust computation and blockchain graph analytics and user

interface system wise security as well as media services and streaming distribution networks

[Recruitment and Informed Consent Procedures, H2.1, H2.2](#) 

Including a) H2.1 The procedures and criteria that will be used to identify/recruit research participants and b) H2.2 Informed Consent Procedures will be designed for the participation of humans.

[Dissemination Mid-Term Report](#) 

Dissemination plan, mid-term update

[Helios system operations](#) 

Deployment and operating HELIOS distributed platform for use in studies

[Integration strategy and planning](#) 

Strategy and roadmap for HELIOS system Integration.

[User-Centric Design Requirements Gathering, final version](#) 

Usercentric design requirements comprising user flow charts and related user experience illustrations Final version VTT

[Pilot validation report](#) 

Reporting pilots open and unsupervised validation with large audiences

[Time-dependent Social Graph](#) 

Report of the usage of the HSN in a P2P fashion, comprising studies of a social network evolution, re presented through a time-dependent graph.

[Data Management Plan, initial version](#) 

Data Management Plan, first version, including a) a description of the technical and organisational measures that will be implemented to safeguard the rights and freedoms of the research participants, its possible consequences and how their fundamental rights will be safeguarded, and b) explanation how the data subjects will be informed of any possible existence of the profiling.

[Dissemination Plan](#) 

First version of the dissemination plan, elaborated and maintained throughout the whole project.

Other (7) 

[Group communication services v1](#) 

Defining a customizable service that establishes adhoc or predefined networks based on contextdimensions first software versions for WP6 integration

[Prosumer production and premium content service v1](#) 

Defining a Journalistic APP integrating its broadcast grade workflow engine that is capable of performing the Orchestration of Microservices first software versions for WP6 integration

[Neuro-based services](#) 

Determine definitive cognitiveemotional neurometrics based on physiological sensors that can be employed to study user responses software for WP5 development

[Mining the social graph](#) 

Introducing a time-dependent social network analysis; software for WP5 development.

[Core release version](#) 

Release version of clientserver core

[Computational Trust](#) 

Introducing the trust model of HELIOS software for WP5 development

[Organic social graph creation](#) 

Principles and practices for organic social graph creation software for WP5 development

Demonstrators, pilots, prototypes (6)

[Beta Release](#) 

Beta release for piloting.

[Prosumer production and premium content service v2 and demonstrator](#) 

Demonstrating a Journalistic APP integrating its broadcast grade workflow engine that is capable of performing the Orchestration of Microservices

[3D authoring tools for V-space creation](#) 

VR authoring tools using web technologies

[Group communication services v2 and demonstrators](#) 

Demonstrating a customizable service that establishes adhoc or predefined networks based on contextdimensions

[Candidate Release](#) 

Candidate release

[Augmented Reality interface for shared spaces](#) 

Immersive interface for shared spaces

Open Research Data Pilot (1)

[Participating Open Research Data Pilot](#) 

Defining arrangements necessary to participate the Open Research Data Pilot.

Publications

Peer reviewed articles (3)

[The Contextual Ego Network P2P Overlay for the Next Generation Social Networks](#) 

Author(s): Barbara Guidi, Kristina G. Kapanova, Kevin Koidl, Andrea Michienzi, Laura Ricci

Published in: Mobile Networks and Applications, Issue 25/3, 2020, Page(s) 1062-1074, ISSN 1383-469X

Publisher: Baltzer Science Publishers B.V.

DOI: 10.1007/s11036-020-01525-3

[Blockchain-based access control management for Decentralized Online Social Networks](#) 

Author(s): Mohsin Ur Rahman, Barbara Guidi, Fabrizio Baiardi

Published in: Journal of Parallel and Distributed Computing, Issue 144, 2020, Page(s) 41-54, ISSN 0743-7315

Publisher: Academic Press

DOI: 10.1016/j.jpdc.2020.05.011

[Boosted seed oversampling for local community ranking](#) 

Author(s): Emmanouil Krasanakis, Emmanouil Schinas, Symeon Papadopoulos, Yiannis Kompatsiaris, Andreas Symeonidis

Published in: Information Processing & Management, Issue 57/2, 2020, Page(s) 102053, ISSN 0306-4573

Publisher: Pergamon Press Ltd.

DOI: 10.1016/j.ipm.2019.06.002

Conference proceedings (2)

[A multilayer social overlay for new generation DOSNs !\[\]\(d0a1791f26d167e866e44ebbf83efebe_img.jpg\)](#)

Author(s): Guidi, Barbara; Michienzi, Andrea; Koidl, Kevin; Kapanova, Kristina

Published in: GoodTechs '19: Proceedings of the 5th EAI International Conference on Smart Objects and Technologies for Social Good, Issue 1, 2019, Page(s) 114-119, ISBN 9781450362610

Publisher: Association for Computing Machinery

DOI: 10.5281/zenodo.3891383

[Networked Collaborative Recommendation Architecture !\[\]\(5a132f13505a6571904d622757b7a8f0_img.jpg\)](#)

Author(s): Ollikainen, Ville

Published in: International Broadcasting Convention Technical Papers (IBC2019), 2019

Publisher: IBC

DOI: 10.5281/zenodo.3891006

Book chapters (1)

[LinkAUC: Unsupervised Evaluation of Multiple Network Node Ranks Using Link Prediction !\[\]\(ab4e2b3fc7e7887b7a72f548aa6f5e60_img.jpg\)](#)

Author(s): Emmanouil Krasanakis, Symeon Papadopoulos, Yiannis Kompatsiaris

Published in: Complex Networks and Their Applications VIII - Volume 1 Proceedings of the Eighth International Conference on Complex Networks and Their Applications COMPLEX NETWORKS 2019, Issue 881, 2020, Page(s) 3-14, ISBN 978-3-030-36686-5

Publisher: Springer International Publishing

DOI: 10.1007/978-3-030-36687-2_1

Datasets

Datasets via OpenAIRE (4)



[Emotional Voice Messages \(EMOVOME\) database !\[\]\(111c5272ee3f91361f0d2e3665dd6ad0_img.jpg\)](#)

Author(s): Gómez-Zaragozá, Lucía; del Amor, Rocío; Parra Vargas, Elena; Naranjo, Valery; Alcañiz Raya, Mariano; Marín-Morales, Javier

Published in: Zenodo

[PIPD2020 - Pinterest Interests Profiling Dataset 2020](#)

Author(s): Galopoulos, Panagiotis; Gkatziaki, Vasiliki; Iakovidou, Chrysanthi; Papadopoulos, Symeon; Yiannis Kompatsiaris

Published in: Zenodo

[Feature Dataset of Centralized & Decentralized Communication Apps](#)

Author(s): Gkatziaki, Vasiliki; Iakovidou, Chryssanthi; Papadopoulos, Symeon

Published in: Zenodo

[Emotional Voice Messages \(EMOVOME\) database](#)

Author(s): Gómez-Zaragozá, Lucía; del Amor, Rocío; Parra Vargas, Elena; Naranjo, Valery; Alcañiz Raya, Mariano; Marín-Morales, Javier

Published in: Zenodo

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