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A Context-aware Distributed Social Networking Framework

Helios

HELIOS will develop, implement and validate a decentralized social media platform that will reflect the dynamic nature of human communications in three dimensions: contextual, spatial and temporal.

This platform is an extension for mobile operating systems



(first Android), providing easy-to-apply peer-to-peer social media functionality for social media developers.

The users' data will be stored on their own device or alternatively in a cloud service of their choice. The users have full control of all the content they create.







TRUST AND SECURITY

The platform calculates how much a user should trust another user or a piece of content based on for example the social graphs and the frequency of interactions.

HELIOS will design, implement and validate a state-of-the-art, decentralized p2p social media platform which will:

Connection descriptor

- strength
- reputation
- trust
- created
- last use
- ...

For human networking, HELIOS will introduce novel concepts for social graph creation and management, which are grounded in trust and transparency.

People have different contexts based on, for example, the location and time of day. In each context they have different interests and friends they want to interact with. HELIOS will recognize the context and act accordingly.

Furthermore, HELIOS will be modular and built upon open source, ensuring that social media designers can easily create novel social media apps on top of HELIOS in the future, beyond the end of the project.

- support the ad-hoc creation and management of social graphs within the context and proximity of the user.
- have true trust-by-design and ensure the highest level of privacy by encrypting all content such that even the service providers do not have access to it. The user can decide for each item who has access to it.



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