Creating a Planetary Nervous System as a Citizen Web

The Internet of Things is an emerging Information and Communication Technology with revolutionary potentials. Its areas of application include (1) the real-time measurement of the state of our techno-socio-economic-environmental systems, (2) the development of a Global Systems Science to manage our world more successfully, (3) greater awareness of chances and risks to support everyone's decision-making, (4) possibilities to enable self-organizing systems, and (5) opportunities to create collective intelligence. I will, in particular, reveal plans to build a "Planetary Nervous System“ as a Citizen Web, which is envisioned to be an open and participatory information system to unleash the power of the Internet of Things for everyone in the world.

The Planetary Nervous System is a large-scale distributed research platform that will provide real-time social mining services as a public good. It is an open, privacy-preserving and participatory platform designed to be collectively built by citizens and for citizens. The Planetary Nervous System aims at seamlessly interconnecting a large number of different pervasive devices, e.g. mobile phones, smart sensors, etc. For this purpose, several universal state-of-the-art protocols and communication means are introduced. A novel social mining paradigm shift is enabled: Users are provided with freedom and incentives to share, collect and, at the same time, protect data of their digital environment in real-time. In this way, social mining turns into a knowledge extraction service for public good. The social mining services of the Planetary Nervous System can be publicly used to build novel innovative applications. Whether you would like to detect an earthquake, perform a secure evacuation or discover the hot spots of a highly frequented city, the Planetary Nervous system makes this possible by collectively mining social activities of participatory citizens.