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Environmental Application Scenarios for the Future Internet

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The phenomenal growth in the usage of the internet, linking millions of people through computers, social networking and mobile communication devices, together with the rapid development of affordable smart sensors in the last few years are expected to have profound effects on the way environmental observations are generated and accessed by communities in the future. The resulting large scale interconnections of these objects (Things) shall genuinely lead to a paradigm shift in the way the Future Internet enables the social communities to understand how changing environment could affect their living, and also how they can adapt their lives to the changes occurring in their environment at more localized scales. Large communities shall be able to monitor the natural environment and share such information with other users of the Future Internet, as well as to use this data in applications outside the environmental domain. In this presentation, I shall discuss some of the key application scenarios of the envirofied internet, including:
1. ubiquitous Sensors and opportunistic sensing, that is the use of relatively inexpensive sensors in everyday's devices such as cars and cellular phones for environmental monitoring [1,2,3];
2. crowd-sourcing and using of the humans as sensors [4,5];
3. converging realities, that is the enhancing of virtual reality and augmented reality applications with environmental observations [6,7]
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