

Advanced trillion MEMS and 3D printed sensors for all of us

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Abstract

This talk highlights the importance of sensors in several emerging applications which will have impact on our everyday lives. So far the big commercial successes of sensor technologies such as MEMS have been in the area of automotive electronics and mobile devices. These sensor businesses have driven the price and performance of the technology to the level that MEMS and other low-cost sensor and actuator technologies such as 3D printing, can be used to address global needs in health care, environmental monitoring, supply and production of clean water, safe food, and environmentally-friendly energy. Several technology and business visionaries share the belief that these sensor technologies, in combination with existing ICT technologies and emerging nanotechnologies, are able to address the bulk of global problems such as diseases, pollution, hunger, and energy production at a cost level which supports deployment of the solutions also in the poorest countries. Several examples of are given on the vision of abundance supported by trillions of sensors.

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