Real-time Computer Vision on Embedded Devices

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Abstract

With the latest generation of smartphones, the line between computer and handset has been blurred such that the capabilities of the latest offerings are comparable to the desktop computers of 10 years ago. At Nokia, the increasing power of our handsets has motivated new lines of research which look at creating innovative mobile experiences. The foremost of these efforts is Point and Find, a system which uses the camera on a mobile phone and real-time computer vision to make the physical environment of the user interactive. In this session, I will present a demo of our Point and Find software, after which all attendees with compatible handsets will be able to download the latest beta of the system. This will be followed by a discussion of the problems and limitations of handsets as pertains to computer vision, how we have overcome those limitations, and the future of ubiquitous computer vision.

Syllabus: *Real-time computer vision, object recognition, ubiquitous computing, embedded devices*