Electronic sensors are our window in to worlds that are hidden from our natural senses. The world inside our bodies that knows, ahead of any visible symptoms, that our heart might be failing. The world outside us which knows that the air will have enough particles to aggravate our asthma, before we have fits of breathlessness. Integrating these sensors in to mobile miniature devices with wireless connectivity helps us create a "sixth" sense that we can carry with us at all times to protect ourselves and stay healthy. However, for this vision to be realized we need more than just the sensor technology, the wireless communication devices and the signal processing to extract information from the sensors. To get continuous information as we do from our natural senses we need to design sensor systems that can be "always-on". In this talk we will address some of the engineering challenges in creating such multi-sensor systems.