Commodity smart phones have made the visions of ubiquitous computing common place. We call these phones "smart phones" simply because they have a mobile operating system, not because they are smart. In fact, they are pretty dumb. They know nothing about their users, despite the fact that they spend hours a day with them. The Ubicomp lab at Carnegie Mellon University has been using these phones to collect a wide variety of data to enable a wide variety of context-aware user experiences, focusing on experiences that require a truly "smart" phone. In this talk, I will provide an overview of our projects and will discuss a number of assumptions we make about phone usage that are wrong and will dramatically impact the way we design mobile smartphone applications.