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Week 8 Critique

Augmented Reality: A New Way of Seeing, Steven K. Feiner, 2002

For the most part this article is a review on what I already knew (its very general), so I suppose I'll keep my comments general. As this article pointed out, many of the current challenges of AR are a matter of technology getting the price, accuracy, and size of hardware down. At least we know that its guaranteed to work in that direction, but we'll see how long it is before AR could become a true global reality. I was quite impressed by the potential of centimeter-level GPS accuracy, but as the author pointed out this is not practical for most setups. This is where I think work on using WiFi? or even better WiMax? could have better coverage, as noted by projects like Intel's PlaceLab?.

But even assuming I can get all of that built into my glasses, I wonder where the platforms could go. There are many obvious applications (what have already been worked on), but I'm curious to see what gets adapted and what worked. Sophisticated algorithms for object recognition and context-awareness need to be developed SIGNIFICANTLY if AR is to be generalized at all outside of a boeing factory (and probably needs to be there as well). When it comes to obstructing vision, I worry that bad results can occur even if alpha-blended with bad timing and poor design. My guess is that its use will be more domain-specific and less general purpose.

As much as I'd like to have information crawling all over the place, I think its quite easy to reach emotional overload if used daily. I would imagine taking off the glasses would feel akin to taking off shoes after a lot of walking. Proper design must make sure that AR isn't used as a delivery platform because its neat, but rather it serves a unique mechanism that cannot be replicated. For example, the existence of AR would not be justified by alerting me of an email or SMS. Cell phones work well enough for that as is. Overlaying of information in organized ways that track objects to help reduce cognitive complexity (especially using spatial information to transform non-linear problems into linear complexity) do justify AR. In particular, AR would help situations where complicated and/or precise mechanical movements by a human are required (such as repair), but keeping state as well as potentially large knowledge-base requirements make it difficult for most (or available) people.