BCS II Course Syllabus
9.012

Midlevel Vision

Study Questions
1. What is population coding, and why is it needed to interpret local visual signals? Explain how it is necessary to understand how motion, disparity, depth, and orientation are represented.
2. What is convolution? Give an example of how convolution can both increase the fidelity of some visual information, while discarding information about other visual properties.
3. Why can't vision be understood as simply a process of filtering? Why does the visual system have to go beyond local measurements of the image to construct representations of surfaces and objects? Give examples of how, why, and when the visual system goes beyond the image data to construct surface and object representations.