

## **Lecture 12.1 Exercises**

### **12.1.1 Optical Illusion**

Michael Bach's webpage: <http://www.michaelbach.de/ot/>

This webpage contains demos of many beautiful optical illusions and visual phenomena. Professor Bach gives detailed descriptions of these phenomena from a theoretical perspective which is similar to the viewpoint expressed in this chapter. He states that "I view these phenomena as highlighting particular good adaptations of our visual system to experience with standard viewing situations. These experiences are based on normal visual experiences, and thus under unusual contexts can lead to inappropriate interpretations of a visual scene (=Bayesian interpretation of perception)." We particularly draw attention to: (i) Hidden Figures, (ii) Rotating Face Masks, (iii) Ames Window, (iii) Neon Color Spreading, (iv) Dress Code Enigma, (v) Adelson's "Checker-Shadow" Illusion, and (vi) Biological Motion.

### **12.1.2 IPython Notebook Basics**

Nature website: <http://www.nature.com/news/interactive-notebooks-sharing-the-code-1.16261>

This demo links to a Nature article about how to use ipython notebook for research purpose. IPython notebook is needed for the interactive demos in the following sections. If you don't have experience with iPython Notebook, in this article you can try the provided interactive demo to get familiar with the usage of this tool.