

## **Project 6: Illusory contours**

- 1) Implement the Gibbs sampling model of contour detection described in *Computational Foundations of Cognitive Neuroscience* (Chapter 5). Show how it behaves when presented with a Kanizsa figure, including different variations studied in Lee & Nguyen (2001). What happens when you alter the strength of lateral connections and tuning width?
- 2) Discuss this simulation in relation to experimental data on illusory contours in visual areas V1 and V2 reported by Lee & Nguyen. What's missing from the model?

### **References:**

Lee, T. S., & Nguyen, M. (2001). Dynamics of subjective contour formation in the early visual cortex. *Proceedings of the National Academy of Sciences*, 98, 1907-1911.