

Assignment 2

Probabilistic Models of Human and Machine Intelligence

CSCI 7222

Fall 2015

Assigned Sep 10

Due Sep 17

Goal

The goal of this assignment is to give you experience in reading research articles involving probabilistic approaches to machine learning.

The Task

Write a one-page commentary on the Weiss, Simoncelli, & Adelson (2002) article that we discuss in class on September 10. The article is fairly dense -- both in understanding the issues in human and machine vision as well as in the modeling methodology -- but hopefully the overview of the paper I give in class is sufficient to unpack the paper.

The commentary should start with a summary of what you think the main or most interesting ideas are in the article. You do not need to summarize the entire article. You can assume that the reader of your commentary will have read the article, but give your take on why others should be interested in it and what research contribution it makes.

After this summary of the main ideas, you can embellish your commentary with one or more of the following:

- Questions about the material for further discussion, either clarification questions or points of disagreement with the authors ("I don't see how such and such will work as the author claims...").
- Comments on how the assigned reading relates to other material you've read, or, if you feel ambitious, you can track down related work in the field and discuss how the assigned article compares to this other work.
- A critique of the work, that might include: What are the flaws in the ideas presented? What are the limitations? Do the authors place their work in the appropriate theoretical perspective? Do the authors overstate their results?
- Your ideas for how the work could be extended or made more interesting and more relevant.

