Small Exercises 10

Unsupervised Learning

These small exercises are meant to prepare the inverted classroom lecture. Keep your answers short: two or three sentences, sometimes even less, should suffice. The purpose is to shape or question your intuition, not your mathematical rigour.

Your solutions are submitted *online* in a form found under the link at the bottom of the page. The submission deadline is *before* the respective inverted classroom!

The homework exercise sheet is due later.

Problem 1:   What makes the learning of a mapping between latents z and inputs x so hard?

Problem 2:   Why do the individual data-dimension variances make FA better than PPCA?

Problem 3:   What happens if you use a Gaussian prior for ICA?