

COMP 690 Data Fusion Fall 2009 Written Assignment 1

Due in the digital drop box Wednesday, September 16 at 11:00 PM

Each of the following essay questions should take roughly 2/3 of a page (12 point, Times Roman, single spaced).

1. Discuss a data-fusion domain in light of the questions and issues for characterizing data fusion applications listed on slides 17-18 of the course slides (p. 7 of the text).
2. Take a specific data-fusion problem and discuss how Figures 1.3 of the text relates to that problem.
3. One subsection of the Wikipedia article “Seismometer” describes teleseismometers. With this as a reference, describe a teleseismometer using the concepts from section 1.3 of the text. Note that most of the concepts in that section (and all of the military concepts) will not apply here nor will most of the internal functionality shown for the generic sensor in figure 1.1 of the text. You will need to refer to some sections of the “Seismometer” article (especially the section “Basic principles”) besides the section on teleseismometers.
4. Summarize the case for the benefits of data fusion presented in section 1.6 of the text.