This is an individual AND NOT A TEAM exercise. Everyone must hand on a paper.

Essay Question 1: Please choose ONE of the following, and answer it to completeness. Include all references and sources. Any material found to be cut-and-pasted from the Internet without attribution will result in an immediate F in the course (That’s part of the department’s academic integrity policy. You’re smart people, you don’t need to do that). Copying from Wikipedia is STRICTLY FORBIDDEN. These must be in your own words.

Again, **please choose and only answer one question**, and send it to [mikeb@buffalo.edu](mailto:mikeb@buffalo.edu) by 11:59:59 on Nov. 1.

1. We’ve covered 39 steps in a software development project. In your opinion, which 5 steps (besides Coding) are absolutely essential, and why?

2. The Tao of Pooh covers three personality types. Among them, is the Ritualist who only lives by prescribed strategies and previous designs. How does that manifest itself in Engineering? That is, how might the Ritualist operate in the workplace? Hint: Overuse of design patterns is one such strategy. What are others?

3. The essay on Levels of Thought gives 4 levels: Emotion, Nuance, Data, and Improvement. Give a real-world example of each (one paragraph per level is fine). That is, look in the news and find an example of each level of thought. e.g. The Anti-Science movement is stuck at Level 1. Find and explain an example stuck at each level.

4. Give a one-paragraph explanation each of the contribution made to Computer Science and Software Engineering by the following 4 people (that is, submit 4 paragraphs, one for each person):

a. Edward Yourdon

b. Grady Booch

c. Tim Lister

d. Seymour Cray