CS 598tar Final Exam:

Please work on the following questions independently. The exam is “open book”. In other words, you may (and are encouraged to) use your notes, class slides, reading list, and Internet resources, then form your own conclusions. The exam is meant to measure your ability to “think like a researcher”. It contains open ended questions. You are asked to offer your view. Original and insightful views are encouraged. Please email me the answer sheet in plain text, one answer per line. Please use the subject line “CS 598 FINAL”. Deadline: Mon, Dec 14th, 2015 (11:59pm).

Note: The questions below encourage you to form your own informed opinions on topics covered in class, and test your ability to offer clear and succinct answers that get your individual point across. They are not meant to measure your ability to copy paragraphs from papers that seem to match the questions. Please work independently.

Q1: In one sentence, what is the main value of subjective logic in the context of enabling new participatory sensing research? (1 point)

Q2: In two one-sentence bullets, mention two main new ideas in the paper “Pushing the Spatio-Temporal Resolution Limit of Urban Air Pollution Maps”. (2 points)

Q3: In one sentence, what was the main idea for preserving privacy in the paper “Privacy-aware Regression Modeling of Participatory Sensing Data”? (1 point)

Q4: In two one-sentence bullets, give two reasons why ensuring reliability of software systems is becoming a more difficult problem. (2 points)

Q5: How did the paper “Humans as Sensors: An Estimation Theoretic Perspective” model human behavior? (In one sentence enumerate and define human model parameters used in the paper. For example: A human was modeled by their weight, W, their height, H, and their age, G) (1 point)

Q6: In one sentence, mention why offering privacy and ensuring security are potentially conflicting objectives. (1 point)

Q7. From the perspective of applications, in one sentence, what is the main contribution of the paper “Multidimensional Analysis of Atypical Events in Cyber-Physical Data”? In other words, what new capability does the paper enable? (1 point)

Q8. In one sentence, what mathematical contribution in that paper makes the above application-level contribution possible? In other words, how is the new capability enabled? (1 point)

Total: 10 points.
Please send answers in an email with the subject “CS 598 FINAL” and the following content in the body (in plain text – no attachments):

Name: <your name>
NetID: <your UIUC NetID>
Q1: <answer>
Q2-a: <first bullet>
Q2-b: <second bullet>
Q3: <answer>
Q4-a: <first bullet>
Q4-b: <second bullet>
Q5: <answer>
Q6: <answer>
Q7: <answer>
Q8: <answer>

Good Luck