

|CS205-001 Midterm 201610

D. Hepting

Wednesday, March 2, 2016

CL420 14:30-15:45

Answer all questions in the exam booklet. Fill out the front page of the exam booklet with your name and student number. Return this sheet with your exam booklet. Fully answer the questions that you choose and clearly indicate which questions you have chosen. Remember that I value quality over quantity in your answers. Strive for clarity in your answers and in your writing.

Choose 5 of 8 questions, 5 x 6 marks = 30 marks

1. Why did Negroponte say that digital multimedia should be called unimedia? Do you agree? Please explain.
2. We have talked about Unicode, UTF-8, and UTF-16. What does each of them represent and how are they related?
3. Why is RGB an effective representation of colour for humans? What is CMYK? Why do we need both?
4. How have we compared vector and bitmap formats? What are the major tradeoffs involved in choosing between the two?
5. Is it true that digital multimedia is discrete whereas non-digital media are continuous? Please give an example. If we convert from continuous to discrete, what advice does Nyquist give?
6. Are there advantages to using HSV or YCrCb instead of RGB? Please explain.
7. What is transcoding? Please give an example.
8. What choices can we make when digitizing a phenomenon? What are their implications?