CSC420 Project Proposal
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Project chosen: Sample Project 3

Plan:
1. Research
   a. Read linked paper in more depth
   b. What is CP-CNN, what is SR-CNN
   c. Learn about the 4 classes we are supposed to classify
2. Detection
   a. Implement CP-CNN from paper
   b. Play around with network architecture from paper to see if we can improve performance
   c. Experiment with using SIFT/SURF features as input instead of raw pixels
      i. Experiment with adding colour information as in assignment 2
   d. Experiment with HOG
   e. Experiment with Haar cascades
   f. Look for other research papers doing nucleus detection, implement those papers
3. Classification
   a. Implement NEP from paper
   b. Experiment with feature descriptors we learnt about in class, e.g. SIFT, SURF
   c. Experiment with autoencoders as feature descriptors
   d. Experiment with Haar classifier features
   e. Look for other research papers doing nuclei patch classification, implement those papers