CS 559:
Instructions for Final Exam

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Instructions for Final

- Emphasis on understanding concepts, not details
- Will cover almost all topics

- Open book, open notes, open homeworks and quizzes
- No laptops, no cellphones
- Calculators OK
  - No graphical solutions. Show all computations.

Reading List (1/2)

- Week 1: not directly included, but probability theory is useful
- Week 2: graphical models (#13-29), covariance matrices and their eigen-decomposition (#55-69, #78-82)
- Week 3: Bayesian decision theory and parameter estimation (#1-82)
- Week 4: parameter estimation, Naïve Bayes classifier, non-parametric techniques (#1-83) (no need to integrate)
- Week 5: data normalization, PCA (#9-32, #40-50)
- Week 6: linear discriminant functions (#5-24, #30-48)

Reading List (2/2)

- Week 8: excluded
- Week 9: linear discriminant functions, perceptron, SVMs (#20-57, #80-#125)
- Week 10: bagging, random forests, boosting (#1-63, #71-74, #79)
- Week 11: hidden Markov models (#7-28)
- Week 12: deep learning (#1-88) (conceptually only)
- Week 13: unsupervised learning, k-means (#6-31)

Last two sets of notes on Canvas