My Background

- Currently working for Cisco Systems
  - Helping AT&T and VzW build the Mobile Internet
- Previously worked for AT&T Bell Labs, Holmdel, NJ
- Academic
  - Ph.D., Department of Statistics, University of Rochester, 1985
    - Specialization – Applied Probability & Stochastic Processes
  - Masters in Statistics, Indian Statistical Institute, 1976
- Courses Taught – Graduate and Undergraduate Level
  - Probability Theory, Linear Algebra, Statistical Inference, etc
- Recent Courses at Rutgers
  - 463/563 - Regression Theory (Summer 2013)
  - 401 - Basic Statistics for Inference (Spring 2013)
  - 583 - Statistical Inference (Summer 2010)
Course Information

- Course # 01:960:580:01
- Location – HLL-552
- Schedule
  - Mondays 6:40 – 9:30 PM
  - Break: 10 min break at 8 PM
- Office Hours
  - After Class or by Appt
- Email – rsr624@yahoo.com

- Tests
  - 3 Mid Terms
    - 65% of total grade
  - 1 Final
    - 35% of total grade
- Homework
  - Assigned every week
  - Will not be graded
  - Homework is a fundamental part of the course. Mid terms and final exam will borrow heavily from homework problems

- Book
  - A First Course in Probability, 9th Ed. Sheldon Ross
  - Will cover Chapters 1 - 8

- Math Pre-Req
  - Elementary Calculus
  - Course will develop concepts in basic probability theory based on mathematical models
This course enables students to

- Understand key concepts in probability such as conditional probability and independence
- Understand random variables and common discrete and continuous distributions
  - Binomial, Poisson, Hyper-geometric, Normal, Chi-Sq, T and F
- Calculate mean/st dev, expectation, moments, and conditional expectation
- Law of Large Numbers, Central Limit Theorem and applications
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<th>Class/Week</th>
<th>Focus</th>
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<td>Introductions, Combinatorics</td>
<td>Ch 1</td>
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<td>2/3/2014</td>
<td>Review of Ch 1. Basic Concepts of Probability</td>
<td>Ch 2</td>
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<td>2/10/2014</td>
<td>Review of Ch 2. Conditional Probability and Independence, Bayes’ Theorem</td>
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<td>2/17/2014</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Mid-Term (1&lt;sup&gt;st&lt;/sup&gt; Half of Class). Discrete Random Variables</td>
<td>Ch 4</td>
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<td>Review of Mid-Term. Discrete Random Variables and Computation of Mean / Std Dev</td>
<td>Ch 4</td>
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<td>3/3/2014</td>
<td>Continuous Random Variables and Computation of Mean / St Dev</td>
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<td>3/17/2014</td>
<td>Spring Break</td>
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<td>2&lt;sup&gt;nd&lt;/sup&gt; Mid Term Review &amp; Bivariate Random Variables + Joint Distributions</td>
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<td>Discrete and Continuous Conditional Distributions</td>
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<td>Properties of Expectations, Correlations. Covariance, Conditional Expectations, MGF</td>
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