Course Information

- Teacher: Cliff Zou
  - Office: HEC243   407-823-5015
  - Email: czou@cs.ucf.edu
  - Office hour: MoWe 10:15am – 11:45am
- Course Webpage:
  - http://www.cs.ucf.edu/~czou/CDA6530-15/index.html
  - Syllabus is on the webpage and WebCourse
- UCF Panopto for online lecture video streaming
  - WebCourse has a video link
  - Posted several hours after each face-to-face class
- Use Webcourse@UCF for homework assignment and grading
  - Keep grade private
  - Homework submission
  - Also have a simple BBS channel

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Objectives

- What you need for performance analysis:
    - Review practical probability theory
    - Review several useful random processes
    - Basic queuing theory
    - Practical analysis techniques
    - Useful tools (Matlab and basic usage of NS2)
    - Basic simulation techniques
        - Discrete-time simulation
        - Discrete event simulation
    - Example cases/papers on performance modeling
        - Prepare for your own research

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Course Materials

- ## Reference textbook:
  - [Introduction to Probability Models, Ninth Edition](#) by Sheldon M. Ross.
  - [Simulation, fouth edition](#) by Sheldon M. Ross.
- ## Reference courses:
  - [CMPSCI673 - Performance Evaluation](#), by Don Towsley, UMass.
  - Course: [COMS6180 - Modeling and Performance Evaluation](#), by Visal Misra, Columbia Univ.
- ## Other references that we can find online

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Course Introduction

- Coursework   times   approx %
  - Written homework   1   15%
  - Programming projects   4   60%
  - Midterm exam   1   25%
- Written homework
  - Mainly for the first half course on knowledge: probability, random process, queuing theory
- Programming projects
  - Emphasis for the second half of the course
  - Example:
    - Basic usage of Matlab on statistical analysis
    - Internet worm propagation simulation
    - Networking simulation using NS2
    - Discrete-event simulation

Course Introduction

- **Midterm exam**
  - Focus on the first half theoretic knowledge on probability, random process, queuing theory
  - Since we have online session, midterm will be open book and like a special homework assignment with 24-hour submission deadline
- **Programming projects oriented**
  - I believe programming projects are more useful for practical skills training
    - Thus we will have 4 programming projects
  - No final exam (to reduce workload)

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❑ Questions?

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