CS6963 Lecture #12

Robert Ricci

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• From last time
  – Scores were really low on HW5, and this is stuff I want you to get!
  – So we are going to do it again as HW6 - you keep your HW5 score, but this is a chance to bring your average up
  – Your choice for when it’s due: Friday midnight or Sunday midnight
  – You **must** show your work - handwritten notes, spreadsheets, R code, whatever
  – You must give me at least two more significant figures than are given in the back of the book

• For today
  – Use R to walk through some of the math from HW5
  – Go through GENI basics

• Walk through R commands

• About GENI
  – Infrastructure for evaluating large scale distributed systems
  – Attempts to fill the need: get lots (or a few) machines distributed all over the place
  – Racks of small machines all around the world, big clusters at other
  – Parts of GENI give you bare metal dedicated networks
  – Other parts give you VMs
  – “Slice,” “Sliver,” “Aggregate,” “RSpec,” ”Manifest”

• Our process today
  – We are going to use a portal, called CloudLab
  – It uses your GENI account
    * I had you do this because it lets you log into several different services, you are free to play around with any of them as much as you’d like
  – It has the ability to dispatch your “slice” to several backend aggregates
  – It has a “profile” that captures request RSpec and a set of disk images
  – You can use canned ones, and/or make your own
  – The one we are going to use today has R installed, accessed via web
  – Idea it to support repeatable research by sharing profiles
  – I will probably have you make some at some point
• Go through
  - Log in to www.cloudlab.us, us ’GENI User’ button
  - Pick U of U, log in with UUID
  - Change profile to RStudio
  - Make sure “Utah APT” cluster is selected
  - Click create
  - Explain what’s going on under the hood
  - Show manifest and list view, web based shell
  - Show Actions → Create Profile, play around with GUI, etc.
  - Use “Instructions” link to get to web page

• For next time
  - Paper analysis #2
    * Remember, you have to find some weaknesses with each paper