Introductory Missive

Sept. 8, 2011

About The Class

Students in almost every field must use computers effectively, but many know only how to use a word processor, spreadsheet, and a web browser. CSCI0931 is specifically developed for students in the humanities and social sciences to provide you with the knowledge you will need to approach problems computationally, to formulate appropriate hypotheses for those problems, and to use computers to test those hypotheses. We'll be focusing on real-world applications to show you how to effectively use computing in your discipline.

The only requirement for this course in terms of equipment is a USB flash drive for saving your data. You will be dealing with large datasets in this class, so at the very minimum, you should get a drive of size of 1GB. You can get 4GB flash drives for less than $10 these days.

You can find the course website at http://cs.brown.edu/courses/csci0931/

Syllabus

The course will be split into four units: three projects designed to teach particular skills and one final project designed and implemented by the students.

The first four projects are:

Voting Patterns

We'll talk about questions like: "Who is the most liberal senator in the U.S. Senate?" and "What is the best way to represent data on a website?"

- Excel skills
- Basic web design

Textual Analysis

We'll be looking into the usage of proper nouns in American novels as a way of making greater claims regarding literary trends. We'll also be showing how programming can be used in the analysis of text.

- Introduces programming

- Parsing literature

Information Mining

We will use Twitter as our data source and discover people's opinions about various topics. We will then present the data in an interesting way. Have fun looking at tweets from all over the world streaming onto your computer and appearing on Google Earth! (made possible by programs written by yourself!)

- Web programming

- Data visualization

Staff and Hours

The recommended way of getting in touch with the course staff is to e-mail `cs0931headtas@cs.brown.edu`, which is easy to remember and will get you the fastest response.

Faculty

- Tom Doeppner (`twd@cs.brown.edu`)
  Hours: By Appointment, CIT 405

- John "Spike" Hughes (`jfh@cs.brown.edu`)
  Hours: By Appointment, CIT 365

- Shriram Krishnamurthi (`sk@cs.brown.edu`)
  Hours: By Appointment, CIT 377

- Steve Reiss (`spr@cs.brown.edu`)
  Hours: By Appointment, CIT 403

Instructor

- Kefei Lei (`kefei@cs.brown.edu`)
  Hours: TBD, CIT 432

The TAs

- Dylan Field (`djf@cs.brown.edu`)

- Maria 'Gaby' Suarez (`mgsuarez@cs.brown.edu`)

- Debbie Lai (`iamdlai@gmail.com`)

- TA email list (`cs0931tas@cs.brown.edu`)

TA hours

- Sunday 7pm - 9pm, MS Lab (1st floor CIT)

- Monday 7pm - 9pm, MS Lab (1st floor CIT)

- Tuesday 7pm - 9pm, MS Lab (1st floor CIT)

- Wednesday 8pm - 10pm, location TBD

Assignments

There will be a few different types of assignments you will need to complete over the course of this class.

Homeworks

There will be short homework assignments after each class. These will typically take less than 30 minutes to complete, and are designed to prepare you for the next class as well as reinforce material learned for each class.

At the end of each unit of the course, there will be a comprehensive assignment designed so that students can demonstrate the skills they have learned in that unit.

Final Project

There will be a final project designed by the students to demonstrate the skills they have learned and developed over the course of the semester.

Grading

The grade for each part of the course will be determined by a mixture of homeworks, projects, and classroom participation. The overall breakdown of the course will look like this.

Part	Percent of overall grade
Voting Patterns	25%
Textual Structure	25%
Information Mining	25%
Final Project	25%