Charlie Ide

which city loves their Pro sports teams the most? ← Ignore this

Elo in college TLF

Computer Science 135 — 2017 Final Project Agreement

Proposal due Wednesday, April 12, in class; changes due Wednesday, April 19.
Project due May 12 at 5pm.

To prepare for your final project, I would like you to spend some time thinking about and planning what you would like to do. The last three weeks of the course will be dedicated to the construction of a project that demonstrates, in a substantial way, what you have learned during this semester. Projects might include:

- ⋆ The progressive solution of a collection of problems of one type. For example, Project Euler (see `projecteuler.net`) considers problems of number theory. Here, perhaps you solve a predetermined number of problems and develop a module of functions and data structures. Or, perhaps, you develop a collection of programs and databases that solve a series of word puzzles (see `www.npr.org/series/4473090/sunday-puzzle`). Or you develop a system for generating or solving a particular type of logic puzzle (see `www.nikoli.co.jp/en/puzzles/`).
- ⋆ The thoughtful development of a utility that helps one explore, in new ways, questions about a collection or database. For example, you might construct a utility that evaluates Supreme Court decisions based on the academic impact rating, H-index (see `wikipedia.org`'s `H-index`). Or, perhaps you build a browser for the New York Public Library's public domain digital collection (see `on.nypl.org/10MpBc2`). The PINK project encourages this type of exploration of the WCMA.
- ⋆ The application of a new statistic or metric to a new domain. For example, you might apply and tune "Elo" ratings to a new sport (see `wikipedia.org`'s `Elo_rating_system`).

Below, please discuss your plans for a final project. **Submitting this form is an indication that, if the project is accepted, you will follow through with the proposed work.** In other words, think about what you write here, carefully.

1. How do you expect you'll want to use programming beyond this class?
Alternatively: What lab have you found most interesting?

I will use it for physics related data gathering. It will also be helpful for sports betting.

2. What Python skills would you like spend more time developing?

How to collect/obtain data and write it into files I can read & use for my programs.

3. *Briefly*, what do you want to do for your final project?

I am going to create a travel adjusted Elo for NBA teams that takes into account recent travel schedules to better predict a game's winner. This will be helpful for betting & identifying potential upsets.

4. For the purposes of focusing my evaluation: What aspects of this project will address those skills discussed in Question 2?

I will be pulling Elo data for several seasons from NBA teams as well as using schedules & city distances to create my own travel data.

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I love this idea — it seems like it would be very easy to develop models for this kind of travel-related bias.

-D