{CS,STAT} 387

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Data science

RECAP

Short piece: Pitch data science as a useful field of inquiry. How does data science differ from computer science, statistics, mathematics, economics…, and, crucially, from the *intersection* of any of these fields?

Also related: Why should I want to spend money on a data scientist?

DUE Tuesday, 2/8 23:55 EST, drd@davidrushingdewhurst.com

Any additional thoughts here?

Probability

- Laundry list
    - Bayes's "theorem", updating, conjugacy…
    - More basic: supports, scores, change of variable, things you do by hand, group transforms
    - Basic information theory, derivation of some probabilistic models from first principles
- What is probability? (this should be fun)
    - Frequentist
    - Logical
    - Degree of belief
    - Betting odds (very elegant and deep connection to options)
    - Remarkably all of these are different interpretations of the same mathematical properties (which are super simple)

Probability

Go to the notes… [ipad coming soon, life will be better]