Challenges

- How can we better support interdisciplinarity in the liberal arts?
- Should the first course prepare majors and/or serve mostly a non-major audience?

Responses

- An interdisciplinary, problem-focused introductory course
- A (truly) interdisciplinary data analytics program

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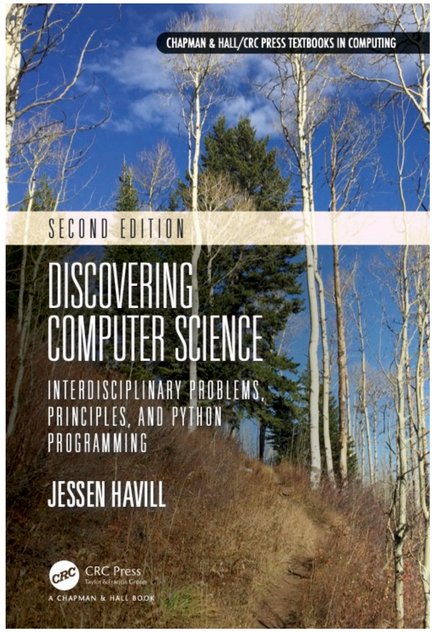
Contents

Contents

An interdisciplinary, problem-focused introductory course

- Do students want to learn about if statements and while loops?
- Or do they want to learn how to solve problems?
- Multiple problem-focused “flavors”
- no prerequisites, for all students
- Python
- Polya’s four steps: understand, plan, code, look back
- Pair programming
- 2 subsequent courses—Intermediate CS and Data Structures—flesh things out for majors (in C++)



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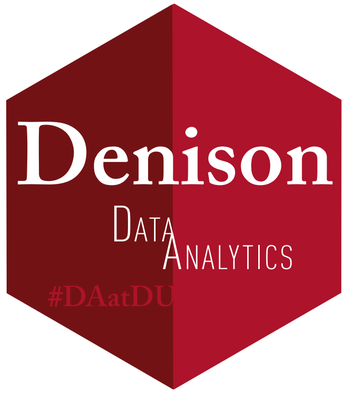
A (Truly) Interdisciplinary Data Analytics program

- Data “Analytics” vs. Data “Science”
- academic program outside Math & CS with an interdisciplinary program committee
- DA faculty: ecology, political science, digital humanities, statistics, OR
- projects drawn from diverse set of disciplines with varied concerns
- low barrier to entry: no prerequisites, shorter Math & CS sequence
- size of major allows broad exploration, study abroad, etc.
- comfort with uncertainty and ambiguity
- communication with various audiences — visual, written, oral
- ethical and social implications of data collection and presentation



Biology
Computer Science
Economics
Environmental Science
Mathematics
Philosophy
Physics
Political Science
Psychology
Sociology

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