Project Deliverables

Lecture 13

Outline

- Project Output
- Examples of Projects

Project Deliverables

- Report
- Code Artifact
- "Visual Presentation"
 - Project webpage or blog
 - Usable Product (UX)
- Presentation
 - Detailed slide presentation
 - Elevator Pitch

Capstone Presentation Event

- Friday, March 12, 9-11AM (Week 10)
 - Attendance is *mandatory*
- Virtual poster session with attendees from:
 - HDSI Industry Partners
 - Faculty across campus
 - Data Science Major
- Your project output will be available on Capstone website
 - By beginning of week 10!
- Most attendees will not be experts in your domain
 - The blog will be how most will learn about your work
 - Prospective employers will be interested in your code quality

Project Report

- Describes the details of your project and its implementation
- Justifies the project
 - why is it interesting?
 - o why is the project worth the investment?
- Details the correctness of the work
- Report may take several forms:
 - Paper for a scientific investigation
 - Proof or evidence of correctness/usefulness for a library
 - An ROI analysis for a product

Project Code-Artifact

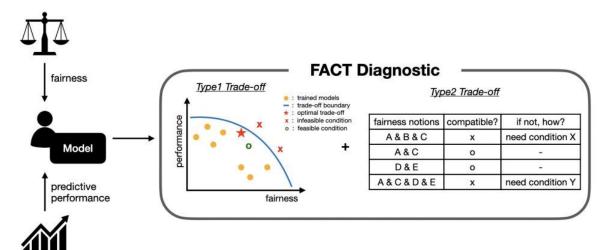
- Reproduces results of the report
- Builds project output for others to use/verify
 - Fight the reproducibility crisis in science and engineering!
- Provides clear code for others to understand and extend.
 - Advance progress more quickly
- May include supporting code (as submodule)
 - Library/Package developed for project
 - Service that deploys a project
 - Instrumentation code for data collection

Project's "Visual Presentation"

- By default a "blog" on a static webpage (easy and effective!)
 - May choose to have a page w/back-end
- An accessible introduction to your project.
- Way to sell the project to a target audience
 - You may choose who the target audience is!
 - This deliverable will be how most will learn about your project.

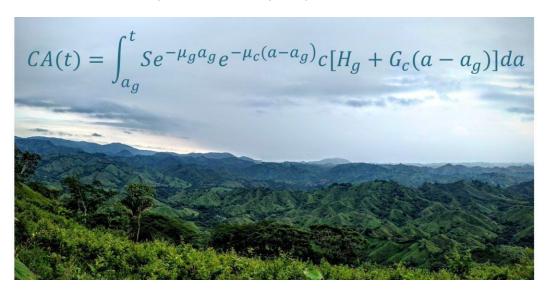
Example: FACT Diagnostic

- <u>Blog</u> explains paper's main points (target audience?)
- Paper contains correctness and results
- <u>Code</u> reproduces the project and provides usable tool



Example: Scaling up Forest Restoration

- <u>Blog</u> intended for general audience (w/interactive shiny app)
- <u>Paper</u> contains scientific investigation
- <u>Code</u> reproduces project



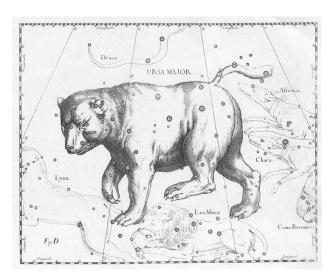
Example: Recount2

- Website makes datasets (output of project) available
- <u>Code</u> for the R package
- <u>Paper</u> justifies/demonstrates the processing tool

recount2

Example: Kallisto

- Website introduces and contextualizes the software.
- Paper describes usefulness and correctness of method.
- <u>Code</u> contains source code for the tool



Example: <u>Voytek Lab</u>

Lab contains multiple projects

- <u>Page</u> contains introduction to problems approached by lab
- <u>Code</u> lists source for both tools/libraries and for reproducing papers
- <u>Papers</u> contain the details of the results



Example: LightGBM

- <u>Page</u> briefly introduces project and contributors
- <u>Paper</u> describes correctness of algorithm
- <u>Code</u> contains library for algorithm usage

