DSI Orientation



Overview

galvanize

- Where the DSI came from
- Course outline
- What a day is like, and difficulty of the repos
- How the instructional team organizes itself
- Graduation requirements
- Strategies for success

Galvanize's DSI



- Galvanize ~ 7 years old, at the Platte campus for ~ 4 years
- Galvanize always wanted to be entrepreneurship/working space/education, recently purchased by K12 (interested in expanding to adult education).
- Galvanize purchased Zipfian's Data Science Curriculum ~ 5 years ago
 - o Industry centered what knowledge and skills do Google, Facebook, Apple, and other tech companies wish they had in job applicants?
- We've been iterating & improving ever since
 - It's a "living" curriculum current, but quality and difficulty of daily exercises can be uneven (we strive for it not to be.) We in Denver feel good about the current state of the curriculum.
- In our opinion, you're taking it at the best time!
 - More heavily focused on deployment, software engineering, big data tools, deep learning. Almost everyday you're improving your Python.

For the next 13 weeks



Your course outline (bookmark it in your browser!):

https://github.com/GalvanizeDataScience/course-outline/tree/21-02-DS-DEN_DEN20

Let's go through it.

Branch is important!

What day/repos are like



- Hours: 8:30 am 5:30 pm. We take lunch from 12-1 pm.
- Very often (1-3x per week) 8:30-9:30 am is special (Assessment, Career Services, Guest Speaker, Weekly Review)
- Lecture then individual assignment 9:30 am 1 to 2 pm (depending on day), lecture then pair assignment 2 pm 5:30 pm. We assign pairs (randomly).
- The repo assignments are meant to stretch you! On some you may get all the
 way through, on others you may only get to 50%. Chin up. Keep coming back.
 The weekly case studies and the capstones give you a chance to work with the
 material again (but on your terms).

How the IT organizes itself



- Lead/Deck paradigm. Lead Instructor is usually Kayla or Chris, and Deck will be Jess and Ian
- Lead gives lectures, Deck helps you with the assignment. Lead will help with the
 assignment too, but may need time to improve lecture for the afternoon or work
 on supplementary materials. There's also grading, administrative tasks, and
 learning new things.
- You may ask any member of IT questions, but the Lead & Deck will be most helpful to you on that day. It will be obvious in Zoom who Lead & Deck are.
- If you have something important to say (will be late, family emergency, job interview, etc.) please Slack all of us in a <u>Direct Message</u>.
- We're here to help! Ask us questions. Try to overcome shyness.

Graduation requirements



From your Student Catalog & Enrollment Agreement:

Graduation Requirements:

In order to qualify for graduation and successfully complete the Data Science Immersive, students should meet the attendance requirements, meet the minimum technical competency, and participate in the Outcomes program.

- Attendance: Students are required to attend at least 85% of total class hours allinclusive (excused and unexcused absences combined.) Students must not exceed 3 unexcused absences throughout the course, or 5% of total class time.
- **Technical Competency:** Students are required to meet and maintain at least a 30% cumulative average on all assessments as outlined by the Data Science academic team.
- Career Services Program: Students are required to complete all relevant activities in the
 Outcomes Program which could include tasks such as completing a resume and online
 profile, conducting mock interviews and phone screens with Galvanize staff and
 delivering a capstone project proposal to the lead instructor.
- **Delivery of the Capstone Project**: In order to attain a Complete graduation status, a student must deliver a capstone project approved by Lead Instructor.

How you are assessed



- First of all, the program is pass/fail*
- 50% of your score is based on the online Learn assessments
 - These assessments will test Python and conceptual knowledge equally.
- 40% of your score is based on your 3 capstones. Half presentation, and half on your code on Github.
- 10% of your score is based on your performance in 3 Mock Interviews (weighted equally).
- You are here for your own reasons. We respect that, and want to facilitate you
 working towards your goals. One of our goals is to make sure that a Galvanize
 graduation certificate continues to mean something, and that our graduates
 continue to find success in the job market. These goals can (should be)
 complementary.

Academic Accommodations

Galvanize is committed to providing students with disabilities equal access and participation in our programs as specified under applicable federal law.

- <u>The Galvanize Accommodations Team receives, reviews and processes all requests for reasonable</u> accommodations.
- Academic Accommodations Policy
 - Located on the Galvanize website @ <u>.galvanize.com/regulatory-information</u>
- All academic accommodations requests must be directed to the **Accommodations Team**. Other Galvanize
 Teams, such as your Campus Team, cannot receive, review, or make determinations regarding accommodations
 requests.
 - If you determine you need to request an accommodation, submit your request to accommodations@galvanize.com
 - You are responsible for:
 - Reviewing and understanding the policy and process
 - Submitting your request to <u>accommodations@galvanize.com</u>
 - Contacting <u>accommodations@galvanize.com</u> directly if you have questions regarding accommodations

Success: the best strategy?



let S be the set of all possible strategies

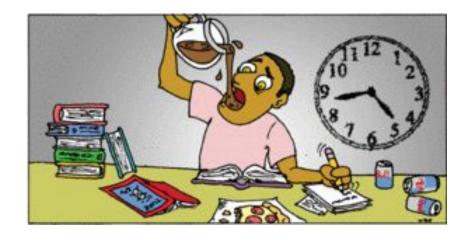
$$\arg\max_{s\in S} P(\operatorname{success}|s)$$

Your worst strategy:



Daily Strategy (a prioritized list):

- 1. Stress that you won't finish today's assignments. Worry that you'll get behind.
- Try to catch up on yesterday's assignment.
 Worry that you are behind.
- 3. Sleep a few hours.
- 4. Wake up having very little mental energy for tomorrow.



Your best strategy:

Daily Strategy (a prioritized list):

- **1.** Take care of yourself (~12 hours/day)
 - a. Eat, Sleep, Exercise
- **2. Prepare for tomorrow** (~2 hours/day)
 - a. Do the reading the night BEFORE.
 - b. Let your brain chew on it while you sleep.
- 3. Soak up as much as you can of today's topic (~10 hours/day)
 - a. YOU WILL NOT SOAK IT ALL UP. Do what you can, then find a good logical stopping point.
 - b. Obeying #1 and #2 will maximize the amount you soak up.
 - c. Take Zoom breaks.



3-month Strategy:

- 1. Perform the daily strategy EVERY DAY.
 - a. One day a week don't do DSI work at all.
- 2. "Catch up" during the break week
- 3. Pick projects and data that interest you.
- 4. "Catch up" while working on your projects:
 - a. Projects will use at most 30% of the topics we've covered.
 - b. You can catch up on that 30% while doing your projects.
- 5. Practice interviewing, and practice pitching your project.
- 6. Speak with confidence, sell yourself, and land a job.
- 7. Don't forget to enjoy yourself.





frank burkholder 11:01 AM

Tips for the next cohort below!



Austin Zimmerman 11:01 AM

Pick up an extra monitor!



Connor Slagle 11:02 AM

16 GB of ram







- 1. Seriously, do the readings
- 2. If you are confused, ask the question
- 3. Focus on the Learning Objectives



Marc Russell 11:02 AM

- 1. 3Blue1Brown video for visualize.
- 2. 2. Extra monitors
- 3. 3. Do the Readings and look over lectures before hand





Josh Miller 11:07 AM

- 1. Readings, if you can't read everything, make sure to at least read something about the topic before the lecture.
- 2. Get the concept of the assignment, don't worry about completing the whole assignment.



Annie Rumbles 11:07 AM

- 1. Do the readings!
- 2. Everyone is probably just as confused as you are, don't be nervous to talk about it, and then ask for some help!







Jacob Budnick 11:13 AM

- 1. Look over the quick reference sheets and practice some of the shortcuts while you still have time they'll save you time later on
- 2. Learn how to use the datetime module ahead of time, there are lots of youtube tutorials and documentation and it'll only take a half hour (don't wait until case studies to learn it)
- 3. There is always panicked scrambling at the end of case studies try to reach out to your team the night before to try to decide on your project and get started early if possible



Connor Slagle 11:14 AM

- 1. Do not be afraid to ask dumb questions the class goes so fast, put pride away to get better
- 2. Push yourself you get out what you put in





Samuel Silver 11:31 AM

- Expect the last hour of case studies to be incredibly stressful
- 2. Understanding concepts behind the assignments are more important than finishing the assignment
- 3. Leverage the instructional staff! Use the "Ask for help" button liberally
- 4. Take blogs with a grain of salt

(edited)



Austin Zimmerman 11:32 AM

START YOUR README BEFORE LUNCH







Allison Ting Zhou 12:00 PM

- 1. Learn more about Github and practice before the course starts, you will use it so much throughout!
- 2. It is a marathon, not a sprint, so pace yourself. Rest when needed, don't burn out too early...
- 3. Don't sweat for more than 10min getting over a hump at an early step in the daily exercise. Check the answer key, it is fine!





Alex Truby 16 days ago

Put time into understanding and becoming familiar with the git workflow in a group environment... it'll ease the stress associated with case studies, as well as ease the transition into industry!







Chun Wu 16 days ago

Ask questions to understand the material. Better to have a good idea on the big picture first then work on understanding the smaller details.



Ann Strange 16 days ago

good ones! I thought the advice we got early on note-taking was really good; focus first on being organized and able to find the answers because you can't possibly memorize it all.





Joseph Wilson 16 days ago

- 1. Create a shared notes doc like a Google Doc.
- 2. The first ~6 weeks are the hardest lean on your classmates and you will succeed together!
- 3. Do the readings and youtube the night before lectures.
- 4. Don't try to finish the assignments, they become increasingly impossible and less helpful use the solutions to get to the relevant portions covered in lecture as soon as your group is stalled, and focus on solidifying the covered topics.
- 5. Ask for help and lean on experienced classmates.
- Case studies are the more stressful due to limited time for EDA and Readme spit up your workloads.

(edited)







Tom Bakke 12 days ago

- 1. Stay positive, take at least one full day off a week, exercise regularly, and take walk breaks at lunch
- 2. Offer to help your classmates as much as possible because they will be much more willing to help you when you need it!
- 3. Get to know your classmates personally, the relationships you build in class are fun and you will enjoy the program more. Bonus Points: Schedule time to play online games together or meet up for a drink (outside of course!)
- 4. On case study days have someone start working on the README in the morning so you are not scrambling at the end as much
- 5. Watch StatQuest videos on YouTube when you are just starting out on a new topic. The instructor does a really good job of explaining complex topics clearly (with some corny jokes along the way)! Link: https://www.youtube.com/channel/UCtYLUTtgS3k1Fg4y5tAhLbw





Allen Chezick 12 days ago

- -Avoid the accumulation of technical debt for coding, it does not go away (OOP).
- -Do the Readings so you can focus on how to apply the data science aspects rather than understanding AND trying to apply.
- -Use the solutions after being stuck for 10 min. Its a waste of time to be stuck for longer and you will get tuck again so don't worry about not practicing 'working through it.'
- -Be curious, ask questions.
- -Dont forget to be organized when completing capstones. Have a path. Whiteboard.







Joseph Wilson 12 days ago

Get out of notebooks and into python scripts/modules ASAP -Jupyter is not for software development and will be a crutch for many students until it's painfully late to switch.



NOW

Let's git to work!

galvanize