

# What Kind of Data Scientist Are YOU?

My trajectory (briefly, for context)

The “Target Personality” of Science

- there are many different target personalities in business
- put down the value judgements
- figure out who you are

## Homework / Notes: The Six Questions

1. Who are you?
  - scientist
  - engineer
  - artist
  - wizard
2. Where is your validation payoff?
  - When you have a “good day”, what happened? What made it good?
  - When you have a “bad day”, what happened? What made it bad?
  - *Put down the value judgement!!!*
3. Do you prefer short projects or long projects?
  - research = long projects
  - ApJ Letter vs. ApJS paper
4. What do you want to learn in your job?
  - super-deep vs. broad (“deep & narrow”, “broad & shallow”)
  - technology vs. applications
5. Do you want mentorship?
  - “apprenticeship” roles (grad student, postdoc)
  - Is this new job going to assign you an apprenticeship role, where you have a mentor, or is it going to throw you in to be the top “expert” yourself?
6. “Soup to nuts” or “Modeling Expert”?

## Different Types of Employers

### Early-phase start-up:

- breadth, not depth
- soup to nuts
- exposure to the rest of the business process
  - collaboration with people *not like you*
- you're the expert
- "MVP", emphasis on the *minimum*
- stock options in early companies

### Mid-to-late phase start-up:

- depth, maybe some breadth
- collaboration with people *like you*
- available mentorship
- beyond MVP, longer-term projects
- stock options in mid-to-late, private companies

### Large Public Companies (FAANG)

- depth, depth, depth
- long projects
- collaboration with people like you
- apprenticeship phase, bespoke internal systems
- long career prospects
- stock that is worth something
- stability, benefits

### Consulting:

- includes consulting w/in big companies, e.g. "Data Center of Excellence"
- short projects, turnover
- breadth and depth
- w/in big company: stability
- flexibility (e.g., COVID parenting)
- "everyone is a Sales Engineer"

### Time Limits:

- Early phase start-up: volatile, most fail—> *best place to learn how to be a Founder*
- Mid-to-late: stock lock-in
- Large companies: can be forever (“lifers”), you start to look like a lifer if you stay > 4 years

## You are a Data Scientist

You *are* a Data Scientist, whatever your answers to the six questions turns out to be. If you’re an astronomer, you’re already a data scientist.

Why Astronomers make good data scientists:

- “How do I get my data scientists to understand context?”
- Order-of-magnitude analysis
- Instrument design, error budget
- *What is holding us back?* Solve 80% problems first.
- Science communication to non-scientists
- Algorithms expert is hire #7, if that

Networking:

- How everyone gets jobs: “internal referrals”
- I am your network. Everyone in this meeting is your network.
- Super biased.
  - “Gorbachev” system of change: *get inside the system, change it from within.*