Kick start your career in Data:

Questions:

* If I’m pivoting careers, are there certain qualities that I can leverage from my background to the data science field?
* AI and DS used interchangeably?
* Junior data scientist – is that entry level and within the first handful of years in field?
* Is it a huge disadvantage to not have masters or PhD? Seems like most jobs ‘require’ that level of education

Notes:

* Industry & Trends
  + 95% of biz cited need tomanage unstructured data
  + 4/10 tech roles are data related
  + 700k new jobs created in 2020 in data
  + 11.5m data jobs will be created by 2026
  + Many high profile people speaking on data importance
    - Mark Cuban
    - Dave wenig – ebay CEO
  + Real world example: Netflix
    - Recommending new shows is one but not extent of it
    - Tailoring trailers based on previous viewing history
  + Real world example: American Express
    - Detecting fraud with ML models
    - Even before fraud, can recommend possible fraud
  + Real world example: Volvo
    - Parts failures
    - Increased safety
    - Autonomous cars
  + Real world example: Disney
    - What does human brain find appealing in story?
    - Then write story based on that data
  + Real world example: Starbucks
    - If you have the app, recommend stores near you
    - Targeted marketing based on availability in stores near you
  + Real world example: Twitter
    - Sentiment analysis
    - Identifies hate speech
* Career Possibilities & Data Roles
  + Data Analyst
    - Retrieves & gathers data, organizes it and uses it to reach meaningful conclusions
    - Historic data – coming up with insights about the impact of data
    - Related roles: systems analyst, quant analyst, tech analyst, ops analyst
    - 20% job growth 2018-2028
    - Junior data analyst salary 67k-95k
    - Skill set/tools – biggest tools are excel and SQL – SQL is becoming increasingly important
      * Python or R are optional – not all companies have it as requirement
  + Data Scientist
    - Comes up with mathematical representation that models data and allows them to derive predictions
    - Does all data analyst role but also model data to bring in future predictions
    - Related roles: data architect, data engineer, ML engineer
    - 56% job growth 2018-2028
    - Junior data scientist salary 95k-110k
    - Skill set/tools – biggest tools are Python and some ML techniques in Python. Deep learning also important.
      * R is also an option for some places however, usage of python is increasing way faster than python
      * Knowledge of python will give you way more options
      * Python is essential tool for all data scientists
  + Research scientist
    - Frames experiments, develops hypotheses and proves their truth or not. Publishes academic papers
    - Similar to data scientist – PhD
    - 16% job growth
    - Junior research scientist 95k-123k
    - Skill set/tools – deep knowledge of algebra, ML and Deep learning algorithms. Often holds a PhD
  + Other tools
    - NoJS
    - Tableau
* Guidance & Next Steps
  + What to do now if thinking career change
  + Trying to sell brainstation
* Q&A
  + How did you change your career?
    - First thing was interest
    - Was SE
    - Worked with data services
    - Was in Cleveland OH
    - Did masters program
  + Do I need to have CS or advanced degree?
    - Data analyst don’t need computer degree
    - If you’ve been through bootcamp and have projects – should be sufficient
    - Can absolutely get a job without the background with a thorough program
  + Masters or PhD a requirement?
    - A lot of uncertainty – start with the top with qualifications
    - Isn’t true – people are being hired from bootcamps
    - Different levels for work you’re doing
    - More experience helps, not 100% necessary
    - His team hired 20 fresh grads right out of college
  + Room to grow with data analyst role?
    - A lot to offer
    - Sister has done it for 8 years and hasn’t slowed down
    - Building dashboards
    - Metrics for leadership
    - Automated web-based reports
    - So many companies still coming up with data strategy
  + Ever too late to break into tech?
    - Up to personal case
    - Have much domain experience that can be drawn on in new career
  + Restricted field or multiple fields (data analyst, data scientist, research scientists etc)?
    - Open to all fields since it is transferrable skill set
  + Junior data scientist
    - Equivalent to entry level position
    - No standard across industries
  + Qualities for DS?
    - Detail oriented with big picture still in mind
    - Must work hard – everybody would do it if not