Interview Mythbusting

SV Python Workshop
June 2021

A BIT ABOUT ME

@ErinBoehmer

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2013 University of Virginia B.S. Comp Sci
2015 UC Berkeley M.S. Data Science

10 years experience working as an engineer / data scientist for startups in NYC, SF, Boston & Uganda

01

You're the one being interviewed

Interviews are two-way Streets

They're interviewing you and you're interviewing them.

Recruiting great candidates is hard and they need to fill this role!

What you're evaluating

Team

Who are your teammates? Will you be proud to be a part of this team?

Type of Work

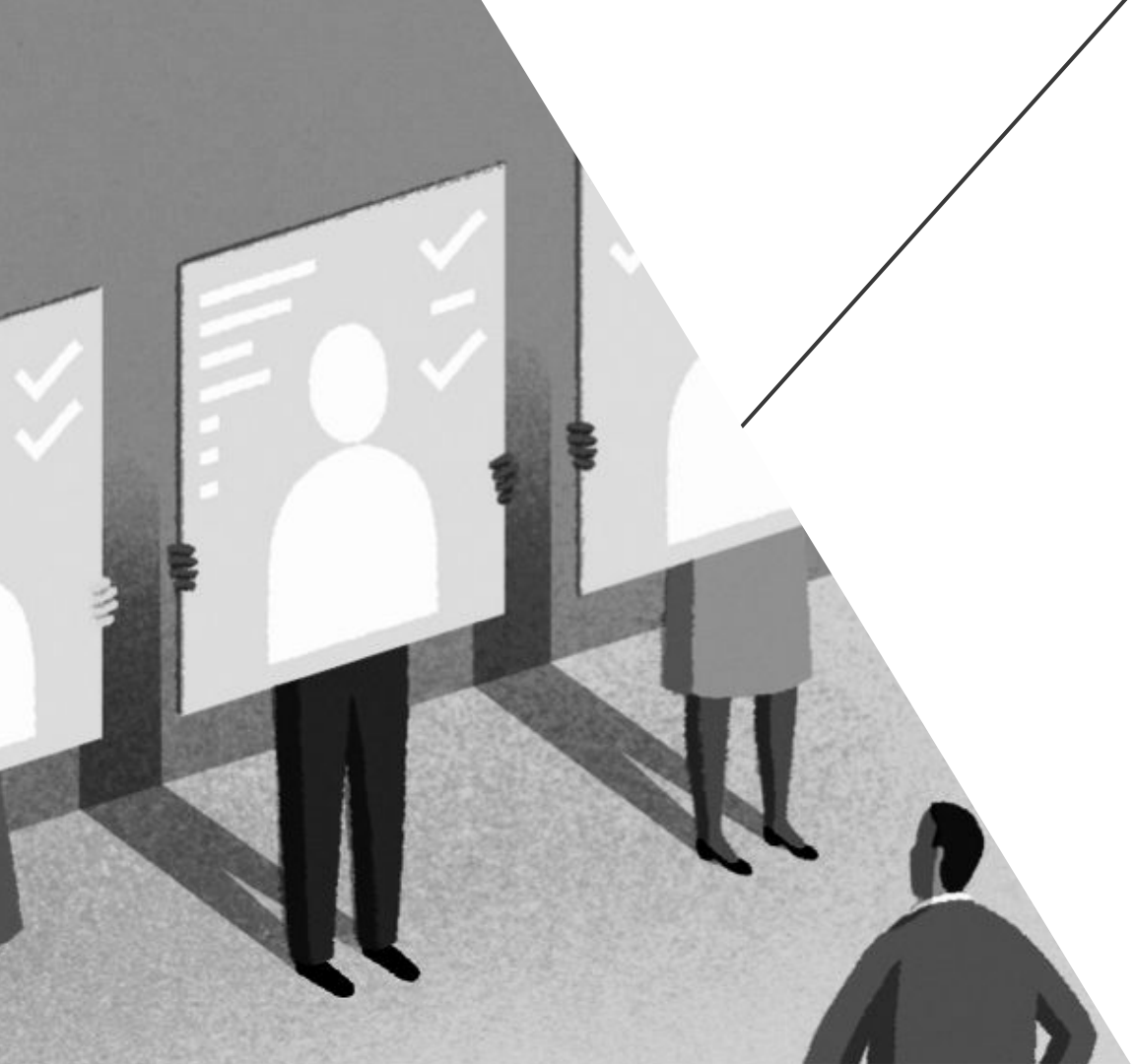
What are you going to be doing day-to-day? What kind of projects will you be owning?

Culture

What are the company's values and do they align with your own?

Growth

How are the company's growth prospects and how will your career grow within it?



02

Interviewers are unbiased Judges of Skill

Let's Have some Perspective

Your Expectation

Their REality

How to Stand Out

- Ask clarifying questions when you're unsure
- Respond to questions with composure
- Be genuinely curious about the team
- Research the industry and prepare questions

03

Technical Skills are the Most Important

LET'S IMAGINE

You're asked to discuss how you would evaluate the performance of an XGBoost model

Good Answer

Precision

% of churn predictions we got right

Recall

% of churn cases we identified

F1-Score

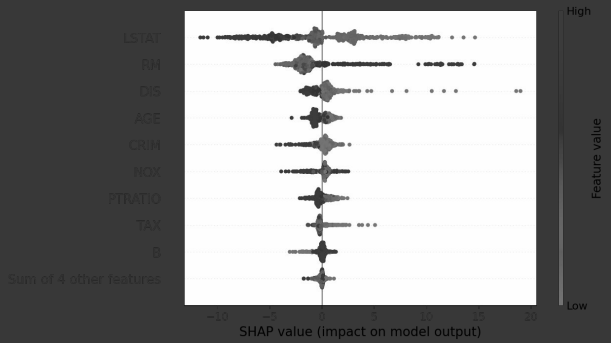
Harmonic mean of precision and recall

Confusion Matrix

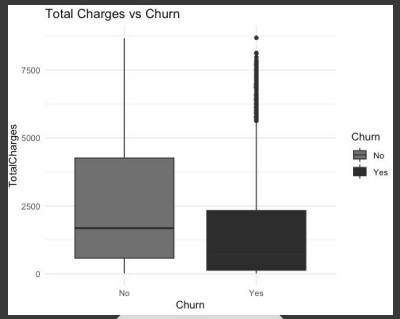
Breakdown of TP/FP/TN/FN

Some Great Answers

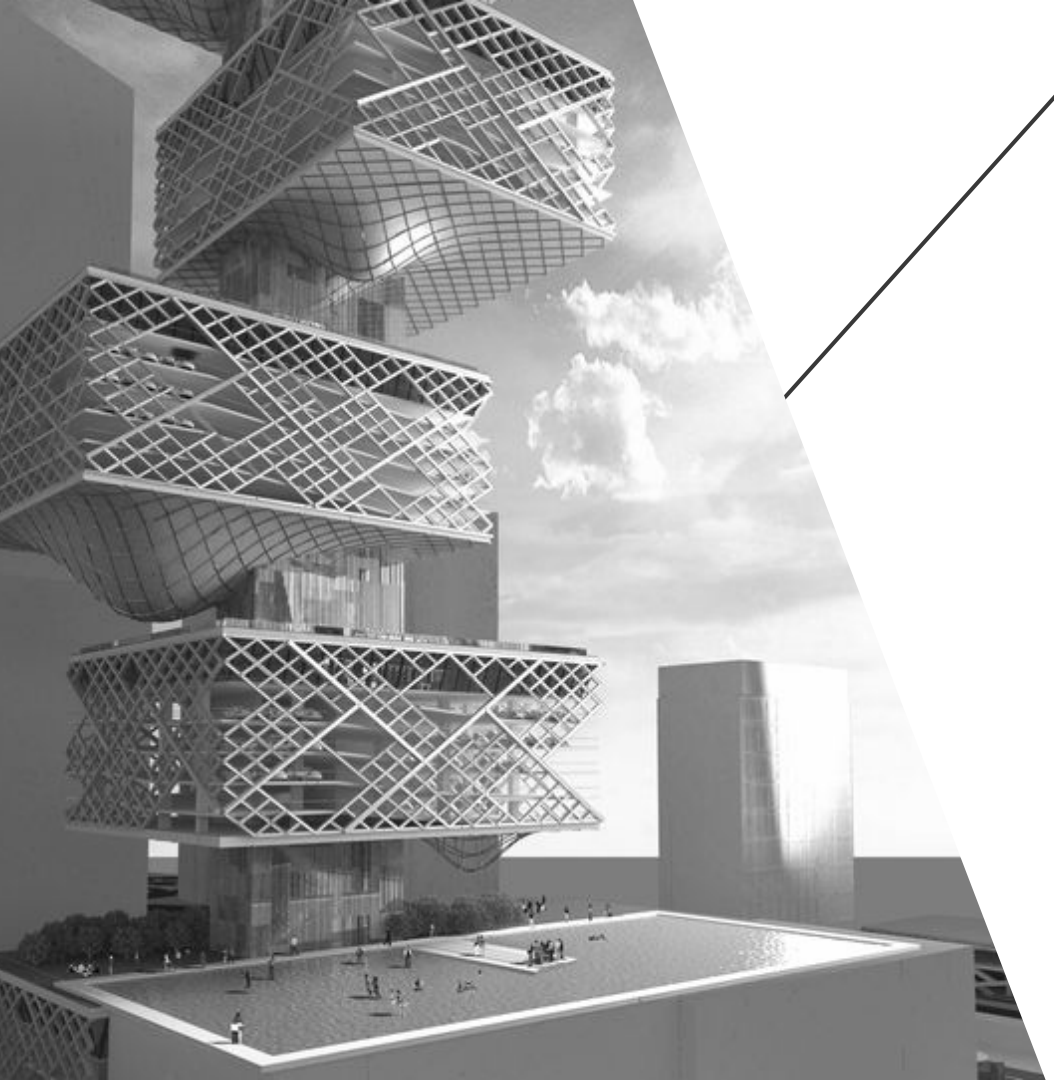
The Experienced Practitioner



The curious Problem-Solver



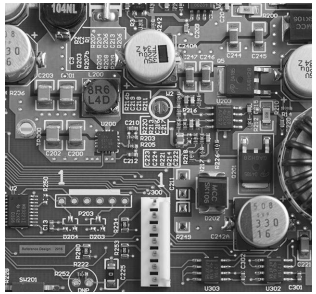
The Data Diplomat



04

Complicated Things are Impressive

When answering interview questions



Expectation

Finding ways to incorporate all the things you know gets you extra credit, right?

Reality

Wrong! Experienced engineers always seek to simplify.

Aim for Elegance

Good Reasons for Complexity

Performance

Complicated things *can* take longer to run, have a larger memory footprint, etc.

Maintainability

Complicated things are hard to maintain

Scalability

Does this code need to be refactored if the dataset grows? If more devs join the project?

05

You Need to have a Portfolio

Andrew Ng ✓
@AndrewYNg

Would love your feedback on this: AI Systems = Code (model/algorithm) + Data. Most academic benchmarks/competitions hold the Data fixed, and let teams work on the Code. Thinking of organizing something where we hold the Code fixed, and ask teams to work on the Data. (1/2)

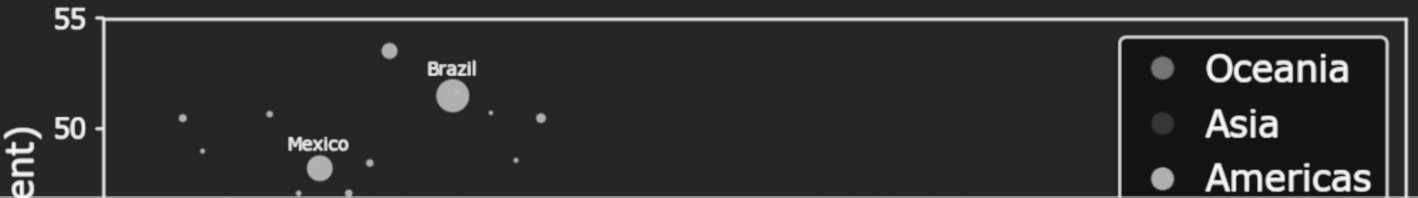
4:12 PM · May 24, 2021 · Twitter Web App

Visualizing Global Poverty & Inequality

Wednesday, August 23rd, 2017

I recently applied for a position at the Center for Global Development, part of which involved a take-home exercise visualizing data from the World Bank's Poverty and Equity Database. I figured I'd share the code and results here. That said, if you're *really* interested in learning about global poverty and inequality, I **highly recommend** checking out Our World in Data, an excellent web publication by Max Roser.

The data, tracking various poverty and inequality measurements by country annually since 1975, is unfortunately extremely patchy, with about 90% of values missing. Even with interior interpolation, that only gets you to about 30%. If the assignment had allowed it, I'd recommend combining sources for a more complete dataset, but that's for another time. Despite the limitations, I'd like to think the figures I put together tell an interesting story. Enjoy!



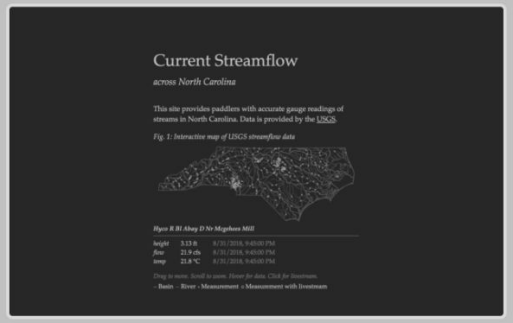
Side Projects

OUTRUN
Synthwave-inspired adaptation of Sega's classic Outrun

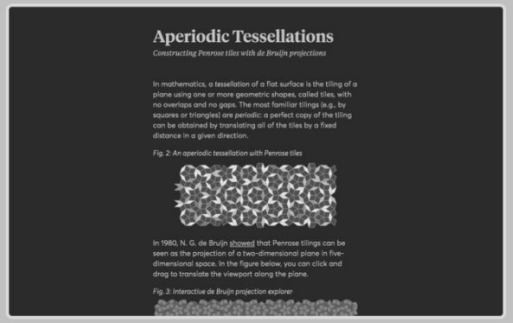
WORD CUBE
Three-dimensional Boggle

SKY HERO
Javascript clone of the classic NES game SkyShark

WORLD NEWS
News from around the world, organized by country



CURRENT STREAMFLOW IN N.C.
Provides paddlers with realtime streamflow data



APERIODIC TESSELLATIONS
Constructing Penrose tiles with de Bruijn projections

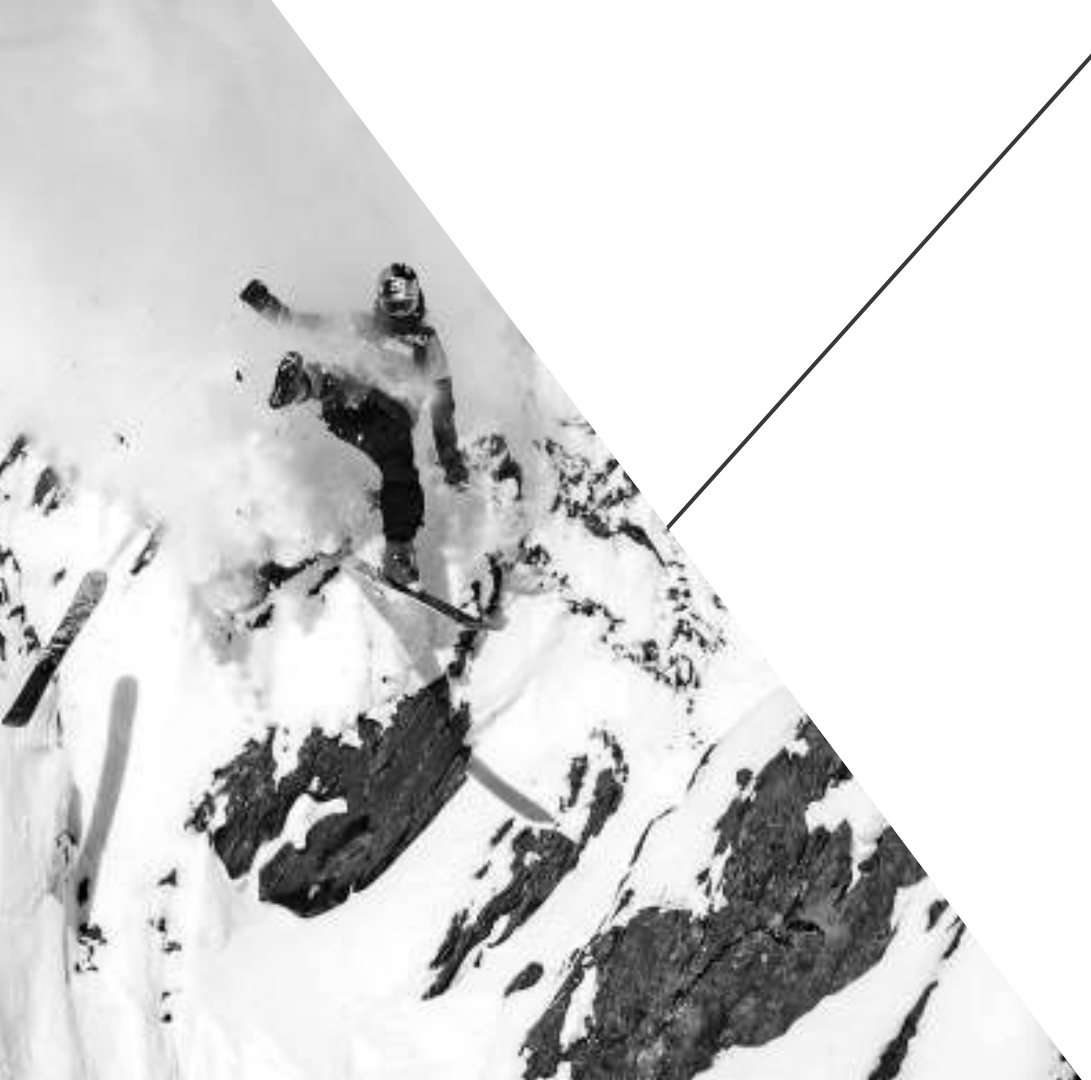
06

A WRONG ANSWER MEANS NO JOB OFFER

Good Interviewers Look for Signal

Reframing the Situation

Situation	Reframe
Stumbled while solving a problem	Opportunity to show you can learn and recover
Having trouble understanding the question	Opportunity to demonstrate communication skills
Feeling nervous	Opportunity to express how eager you are to work with this team
Unsure where to start	Opportunity to demonstrate how break down problems

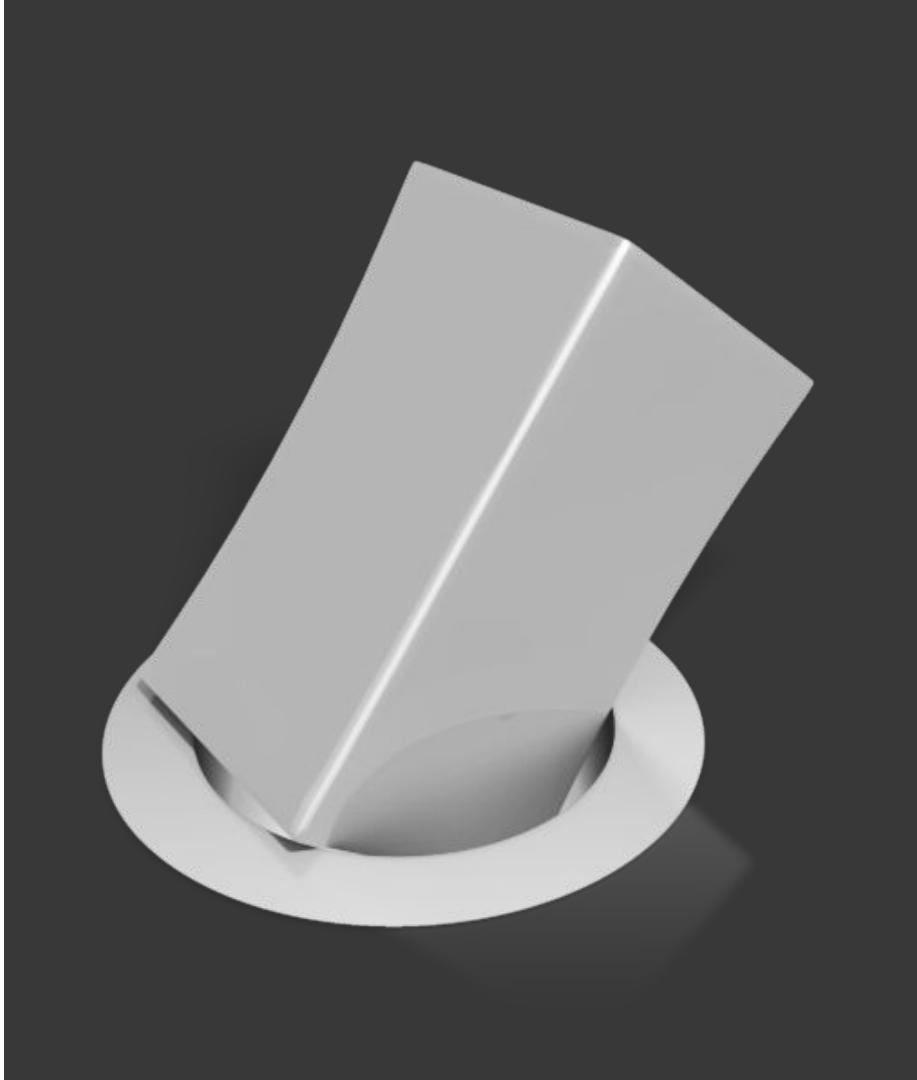


07

If you don't get an offer, you weren't good enough

NOT EVERYBODY IS RIGHT FOR **EVERYTHING,**

BUT **EVERYBODY** IS RIGHT FOR **SOMETHING**



08

Only Interview when you NEED a Job

KNOW YOUR WORTH

Data Scientist Salaries

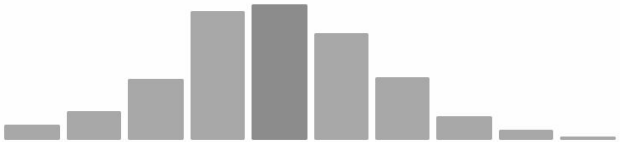
16,290 Salaries Updated May 23, 2021

Very High Confidence

All industries | All company sizes | All years of Experie...

Average Base Pay

$115,299 / yr



Additional Cash Compensation

Average	No Reports
Range	No Reports

How much does a Data Scientist make?
The national average salary for a Data Scientist is $115,299 in United States. Filter by location to see... More

Salaries for Related Job Titles

Big Data	$104K
Data Analyst	$68K
Data Scientist Intern	$121K
Quantitative Analyst	$109K
Senior Data Scientist	$139K

Crafting Your Narrative

Interviewing is a Skill

Data Positions @ Carta

carta.com/careers

Product Data Scientist

boards.greenhouse.io/carta/jobs/4355748003

Machine Learning Engineer

boards.greenhouse.io/carta/jobs/4399461003

Data Engineer

boards.greenhouse.io/carta/jobs/4446123003

Offices in Seattle, SF, NYC, Salt Lake City, Toronto, Rio de Janeiro

Panel Discussion

First...

What's something you do now that you didn't do when you were first interviewing?

And Then...

What data science resources do you rely on and recommend?

QUESTIONS?