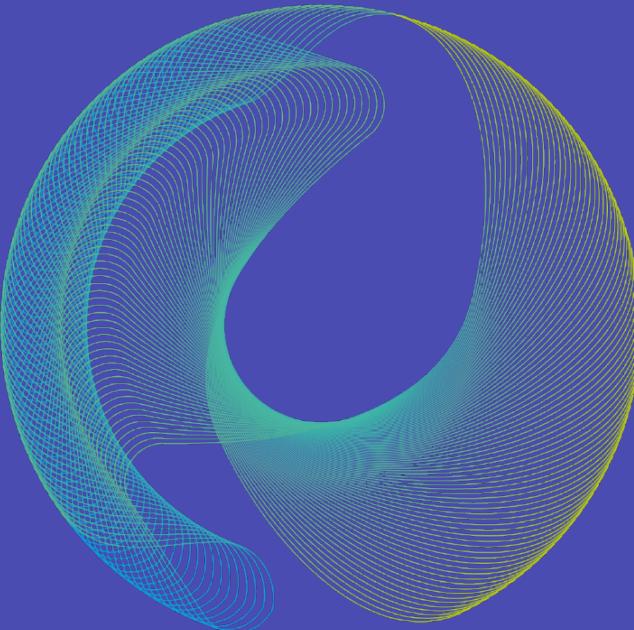


Building a Data Science Portfolio



Agenda

My Transition and Learning journey

Why you are now a global Talent

Why do I need a Data Science Portfolio?

What kind of Portfolio should I develop?

How to develop your Portfolio (Demo)

Put yourself out there!

Crafting a good Data Science Resume

Questions

My Transition & Learning Journey

Meet Opeyemi



Current :

- Data Scientist - Cowrywise (FinTech)
- Data Science Mentor – Udacity
- Lead Data Community – Young Data Professionals
- Data Science Mentor – Data Science Nigeria (DSN)

Previous :

- Data Science & Analytics Consultant - Deloitte & Touche (Big 4)
- Machine Learning Engineer - Omdena (AI Startup)
- Supply Chain Planning Analyst – Beiersdorf (Nivea)
- Data Science Intern – Paylater (Carbon)

Education :

- Electrical/Electronics Engineering (1st Class Hon.) – University of Ibadan

My Data Analytics Journey - Hacks



Define your Learning path and area of Interest

Business Analyst
Data Analyst
Data Scientist
Data Engineer
Machine Learning Engineer



Staying Focus

Be wary of information overload



Discipline & Consistency

Stay committed and dogged to your learning plan
Continuous learning



Join a community & be active

Get a mentor / guide
Stay enthusiastic
Put your work out there
Don't be humble about you do

It's a Marathon not a Sprint

Why you are now a Global Talent!

Insight Driven Organisation (IDO)

Data Literacy and value discovery from data has bring about two(2) type of organisation

- Traditional & Insight Driven
- An insight- driven organisation (IDO)

Building Block of an IDO



Why do I need a Portfolio ?



Jordan
@jordan_stratton



ENTRY LEVEL JOB OPENING:
Hiring recent college grads

REQUIREMENTS:

5 years of experience, 6 Olympic
gold medals, and superpowers.

a) Job Role Advertised: Data Scientist 1

Desired Skills mentioned in the job advertisement:

- Experience with Big Data technologies including but not limited to:
Sqoop, Hive, YARN, Spark, NiFi, Kafka, HDFS, and HBase.
- Knowledge in **JanusGraph, Apache Ranger, Apache Atlas, and graph-based solutions.**
- Knowledge of scripting and programming languages (e.g., **Perl, Python, Java**)
- Knowledge of reporting tools (e.g. **Tableau, Power BI**)
- Knowledge of data science tools (e.g. **Knime, RapidMiner**)
- Knowledge of regression modelling techniques
- Knowledge of AI and machine learning techniques
- Knowledge of **Linux**
- Experience with Agile methodologies (e.g. **Scrum, Kanban, Dev/Ops**)

What does this tell you ?

Even for an entry level role, most companies want to have people with a bit of real life experience.

How do you actually get a real life experience?

Develop a **Personal Data Science Project / Portfolio**



Jonathan Tesser • 1st

Career Whisperer for Young Professionals | LinkedIn Content Connoisseur

2w • Edited • ④

•••

My last three data hires had a combined zero years of data experience.

But they were the best hires I ever made.

Why?

Because all of them had Amazing Data Portfolios.

Eye popping graphics. Brilliant analyses. Stunning breadth and depth of work.

But none of them worked at a FAANG. Or a fortune 100 company. Or anything else y'all salivate over.

Internships are great, especially for learning the "soft skills" ropes.

But your project portfolio is where you strut your stuff. Ignore this at your own peril.

#tesstimony #jobsearch #data #internship



Mark Ross • 2nd

Pricing, Risk, & Analytics - VP @ Numerix | Ex-Morgan Stanley VP | Care...

2w •••

Experience has its merits for sure, but having actually DONE something of quality that you can confidently talk about during an interview is a game changer.

Like · 9 | Reply · 1 Reply



Jonathan Tesser **Author**

Career Whisperer for Young Professionals | LinkedIn Content C...

2w •••

It really is. It wows me every time **Mark**

Like · 1 | Reply

Evidence of your data
science skills

Why do you need a Data Science Portfolio ?

Your only option to build trust in
any Recruiter without a relevant
degree

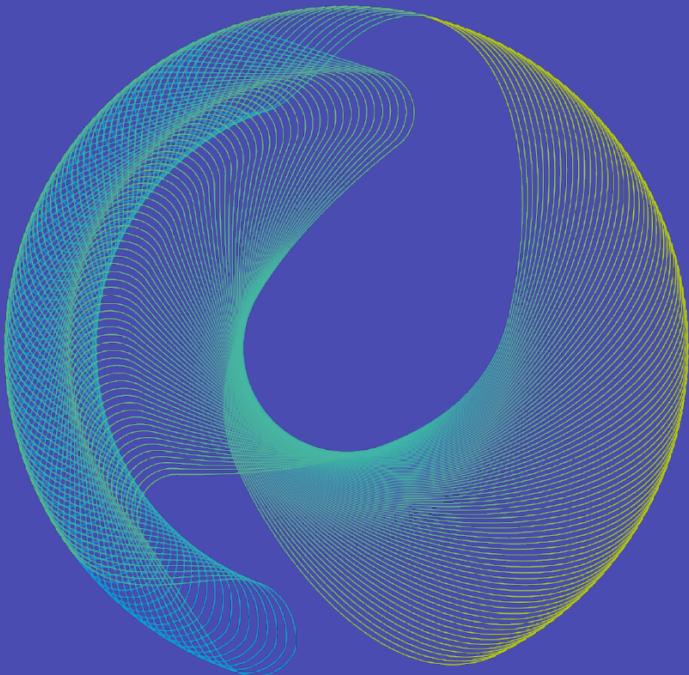
**What kind of Data Science portfolio
should I develop?**

- Build a portfolio of data science projects around your interests



If you are passionate about your data science projects, the portfolio will shine through when you discuss them with potential employers. So choose projects you would love to work with and enjoy showing off.

- <https://blog.wetalksound.co/posts/how-we-turned-over-18000-pitchfork-com-music-reviews-data-into-interesting-insights>



I love projects where people show that they are interested in data in a way that goes beyond homework assignments. Any sort of class final project where you explore an interesting dataset and find interesting results... Put effort into the writeup... I really like seeing really good write-ups where people find interesting and novel things...have some visualisations and share their work.

*~ William Chen
(Data Science Manager, Quora)*

- Build a portfolio of data science projects that showcase other soft-skills such as communication, problem-solving & structured thinking



A lot of data science is about communication and presenting data.

- <https://towardsdatascience.com/exploratory-data-analysis-feature-engineering-and-modelling-using-supermarket-sales-data-part-1-228140f89298>
- <https://fabiyiopeyemi94.medium.com/how-severe-are-car-accidents-in-the-us-c86af93ad050>

Projects to Explore

- Data Cleaning Project - Take disparate datasets and make sense of them.
 - e.g. You can try scrapping the website to extract a data and analyse
- Data Storytelling Project - A data storytelling project demonstrates your ability to extract insights from data and persuade others.
- End-to-End data project
- Competitive Data Science :- Kaggle , Zindhi etc.

Data Sources for Projects



<https://www.kaggle.com/datasets>



<https://www.data.gov/>



<https://archive.ics.uci.edu/ml/index.php>



<https://zindi.africa/competitions>

<https://github.com/fivethirtyeight/data>

<https://www.dataquest.io/blog/free-datasets-for-projects/>

How to develop a good Data Science portfolio

Two types of Data Science Portfolio Development

Story telling / CRISP-DM modelled portfolio

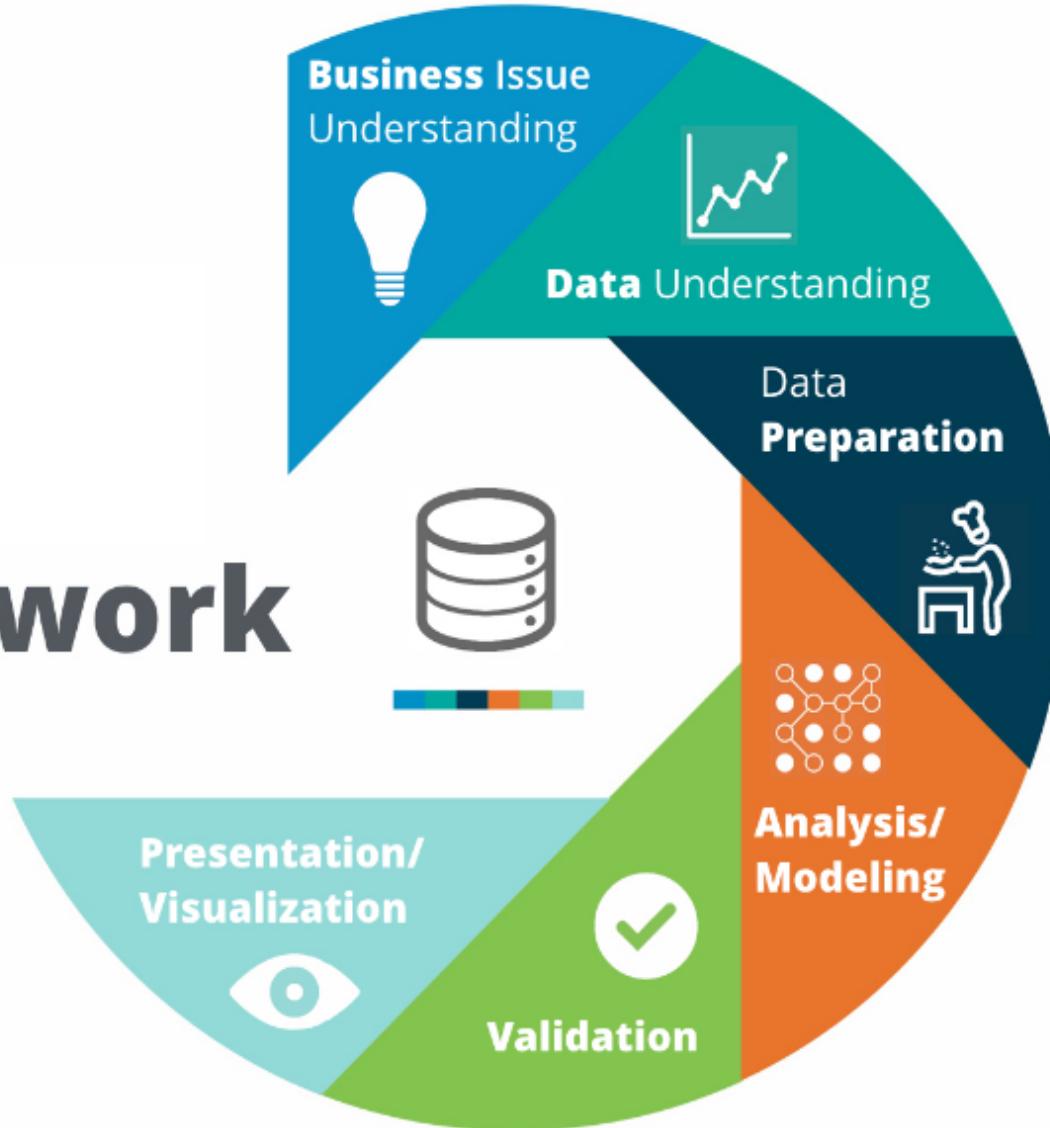
- Expertise required - Knowledge covered in the Academy
- Other skills required - Basic writing skills (This can be improved upon with practise)

Core Technical

- Expertise required - Intermediate / Advanced skills
- Somewhat knowledge of basic software engineering tool will be required - Version control (Git/GitHub)

Cross Industry Standard Process for Data Mining (CRISP – DM) Framework

Framework



Examples

- <https://fabiyoipeyemi94.medium.com/datathon2020-predicting-weather-disruption-of-public-transport-86373a19e6bc>
- <https://medium.com/@debbyalenkhe/case-study-a-telecommunication-performance-analysis-15641be83ef5>

Example

- <https://linktr.ee/JessAnalytics>
- <https://risenw.github.io/risingodegua>

Demo

Building a static page with Github

Objective

- Introduce Github
- How to make an upload on Github using a simple pet project
- Work on a static project portfolio page

Requirements

- Create a GitHub account (www.github.com)
- Basic HTML tags (Cheats can be downloaded
 - <https://www.markdownguide.org/cheat-sheet/>
- Make a new GitHub repo and initialise the readme
- Go to the settings
- Go to Github pages and select master branch
- Select theme if you would like
- Go to the link at the top of the GitHub pages section
- Make any changes you would like to using the Markdown of the readme

Crafting a good Data Science Resume

What is a Resume?

- Your Resume is YOU!!!
- The recruiter makes a judgement about your technical skills base on what your Resume portray
- Without a robust **RESUME**, you may not get an **INTERVIEW** invite

DS Resume Features

- Basic Information - Name, Job title, Location, LinkedIn
- Skills (Listed) :- Technical (Excel - Intermediate, Power BI, SQL, Python , Python for Data Science (Numpy, Pandas, Matplotlib, Machine Learning with SckitLearn etc.
- Work Experience
- **Projects** - For Fresh graduates & those transitioning
- Education
- Volunteering / Competitions participated in / Hackathon

Put yourself out there!

Put yourself out there!

Build your Personal Brand

- What comes to People's mind about you?
- Having an active online profiles can be a good signal fo

Generally, when I'm evaluating a candidate, I'm excited to see what they've shared publicly, even if it's not polished or finished. And sharing anything is almost always better than sharing nothing.

- David Robinson

Principal Data Scientist at Heap



Don't be scared or afraid to make that bold step of putting yourself out there

It's a Marathon not a Sprint

