What, Why & How of Data Science Internships

Date : 04-09-2020 | Speaker : Ayon Roy | Event : HackGujarat



Hello Buddy! I am Ayon Roy

B.Tech CSE (2017-2021)

Data Science Intern @ Lulu International Exchange, Abu Dhabi (World's Leading Financial Services Company)

Brought Kaggle Days Meetup Community in India for the 1st time

If you haven't heard about me yet, you might have been living under the rocks. Wake up !!

Agenda (04-09-2020)

- My journey as an Intern with 4 organizations
- My learnings as an Intern
- The What of Data Science Internships?
- The Why of Data Science Internships?
- The How of Data Science Internships?

BONUS : How to rock your next White-Board Interview for Internships

Visit - AYONROY MI

My Journey as an Intern with 4 Organizations

My First Internship @ PyTorq (Al Project Intern)

From December 2018 to March 2019



Visit - AYONROY MI

My Responsibilities

Providing an AR display that uses AI image recognition to streamline complex maintenance of machines like refineries. It also reduces human error rates.

Virtual showrooms can provide enhanced product selection while a learning algorithm customizes both products and the buying experience itself.

My Second Internship @ Datum Guy (Data Science Intern)

From April 2019 to June 2019

My Responsibilities



Using Facebook APIs to strategize content & user retention activities as per the time & week of the day.

After analyzing several activities like User Activities & Post Impressions etc, the analysis would help the Digital Marketing team to create content as per the demand & the analytics also specified the time slot to them when to post on which platform/groups etc.

My Third Internship @ MateLabs (Summer Intern)

From July 2019 to August 2019



My Responsibilities

Explored the domain of Auto ML and got my hands dirty with some real world use cases while practicing the concepts of Time Series Analysis etc. Also used LSTMs, RNNs etc for other use cases.

Participated at In-House Kaggle Competition there to sharpen my skills in ML. Also helped in developing content for use cases.

My Fourth Internship @ Lulu International Exchange (Data Science Intern)

From January 2020 to Present



My Responsibilities

Working to build a dashboard which would forecast the Corridor wise Requirements for various business corridors so that they always have the stock for smooth operations.

Dimensions like Time are ought to be studied well for a business to grow and I am experimenting/forecasting that with a fusion of Big Data; utilizing the power of Data Science to solve some of the critical problems for the World's Leading Financial Services Company.



My Learnings as an Intern



Ayon Roy Speaker 😤 Doing ML, Deep Learning, AI, Data Science, Python @ FinTech Ha... 1mo • Edited • 🛞

The 10 biggest learnings from my 4 Data Science internships -

You can't be completely reliant on what those #datascience courses teach you.
 Do self projects.

2) Love using Code IDEs like Visual Studio Code etc, in addition to Jupyter Notebooks.

3) Take time to code, but keep the code simple.

4) Document things as if you are taking notes to pass your examinations.

5) Focus on the Readability of your code which does the heavy-duty Data Science.

6) Focus on Modularizing your code. (include functions, classes, etc.)

7) Be attentive & curious.

8) Smile & talk to people around asking good questions.

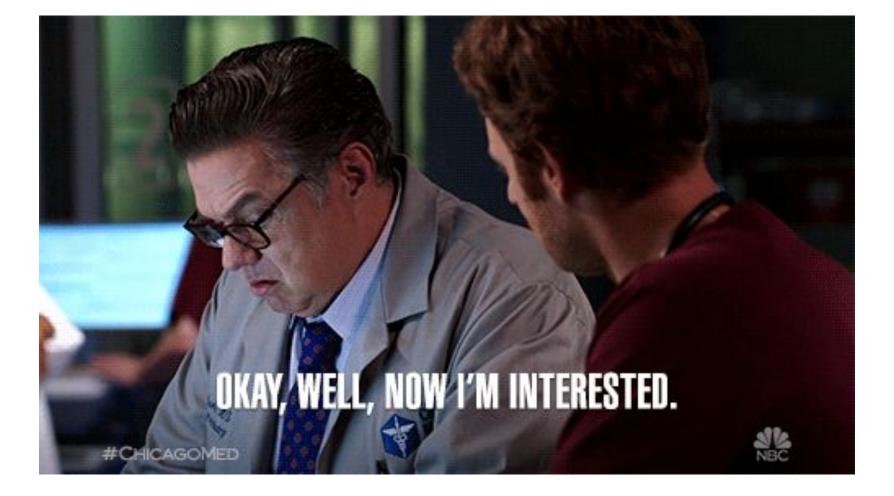
9) Don't stress out, you are not expected to know everything.

10) Be grateful and reward yourself with something as you have got an **#internship**.

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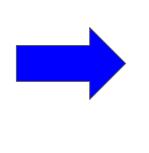


The What of Data Science Internships



What are the requirements of a decent Data Science Internship Opportunity ?

Let's divide the variety of Data Science Internships out there in the industry





Requirements for Entry Level Internships

- Ideal for Second-Third Year Students of a 4 year Undergraduate course
- Basic Level of Python, OOPs, File Systems
- Good knowledge of Scraping, Numpy, Pandas & Data Visualization libraries
- High level overview of Machine Learning algorithms
- Few basic Data Pre-Processing & Exploratory Data Analysis Projects

Requirements for Middle Level Internships

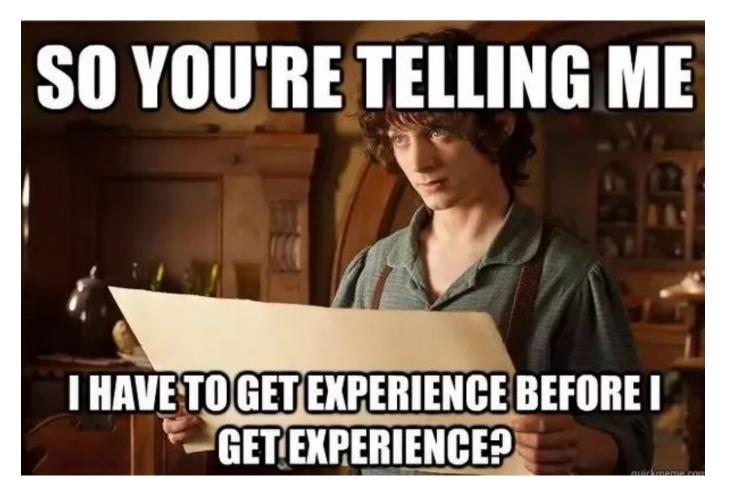
- Ideal for Third-Fourth Year Students of a 4 year Undergraduate course
- Sound knowledge of Data Science concepts & other ML algorithms with good grasp on statistics & concept of maths, SQL
- Good knowledge of Deep Learning concepts, DBMS, API development
- Self projects using ML algorithms

Requirements for **Advanced Level Internships**

- Ideal for Final Year Students of a 4 year Undergraduate course
- Specialised domain of expertise like Computer Vision, Natural Language Processing etc.
- Proficient with whiteboarding of ML algos along with explanation of the basics
- Basic knowledge of Docker, Cloud
- 4-5 very good projects using the complex Deep Learning concepts like LSTMs, Transformers etc.

Best way to get a Pre-Placement Offer before campus hiring starts

The Why of Data Science Internships



Why should students do **Data Science Internships**?

- To learn dealing with Messy, unstructured, incomplete data (This is real industry)
- **To experiment & learn new things** as an Intern so that you can save time as a Full Timer excluding the mistakes you did as an intern.
- To understand how end to end real world Data Science applications works.
- **To network with people** who look like Future of You.
- To work under pressure & learn how to deliver in tough deadlines too.

To make like minded friends & throw a party at Starbucks



Ayon Roy

Speaker 🏆 Doing ML, Deep Learning, AI, Data Science, Python @ FinTech Ha... 2mo • Edited • 🔞

One of my friend asked me " Why I hunt for **#internships** in Data Science ? For certificates, stipend?"

My answer -

It's my way of saving a few days of my future, while I enter the industry as a Data Scientist in 2021.

Friend asked " How ? "

My answer -

I experiment & learn new things spending X days as an intern making tons of mistakes and at the end of X days, I know how to setup, deploy #datascience applications. Thus I can save days while I reiterate my learnings as a full timer, excluding the mistakes I did.

Friend again asked " Doesn't certificate, stipend matter for you ? "

My answer -

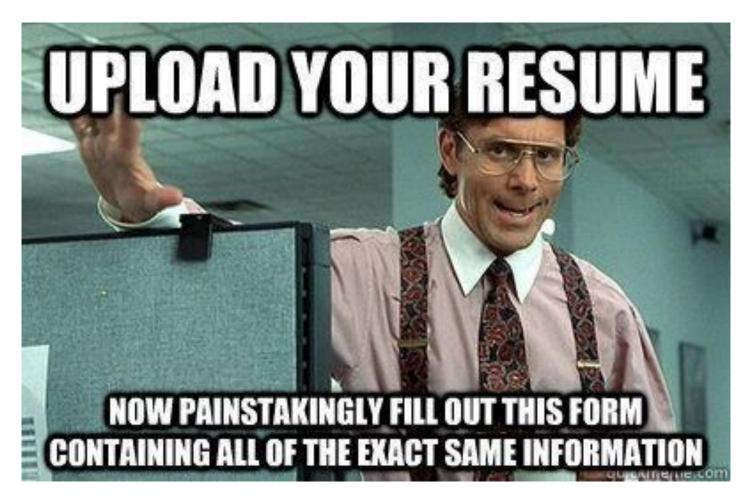
Certificates matter for showing to college, stipend matter to sponsor my cup of coffee at Starbucks.

But, Internships matter for my **#career** growth, so stipend and certificate are not my primary reasons for doing Internships.

Friend again asked " Help me get an internship "

The How

of Data Science Internships

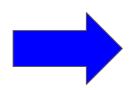


How to apply for Internships ?

- LinkedIn Jobs [Worked for Me]
- Angel.co [Worked for Me]
- Internshala [Not Worked for Me]
- Through Organization's Careers Page [Worked for Me]
- Commenting Interested on someone's LinkedIn Posts
 [Not Worked for Me]
- Career/Internship Fairs [Never Tried]
- Via Winning Hackathons [Worked for Me]

I applied to only 14 Internships till date, got 6 final offers, I accepted 4

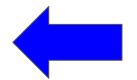
My First Approach



THAT MOMENT WHEN THE INTERNSHIP APPLICATION FORM

ASKS FOR REFERENCES





My Second Approach

How to rock your next White-Board Interview for Internships?

- Start from the top left corner of the whiteboard; so that you have more organised space for your ideas/thoughts.
- Leave a blank line between each line of your code.
- Choose variable names wisely.
- Draw the things to get a clear picture.
- Write down what values the variables hold as the program is running.
- Speak out loud what you are thinking to solve the problem.
- And finally please listen carefully to what your interviewer speaks.



WARNING for of Data Science Internships

Pay for Trainings, not Internships





Let me answer your Questions now.

Finally, it's your time to speak.





Questions ? Any Feedbacks ? Did you like the talk? Tell me about it.

If you think I can help you, connect with me via

Email : ayonroy2000@gmail.com

LinkedIn / Github / Telegram Username : ayonroy2000

Website : https://AYONROY.ML/