



PAPER PD02

A BEGINNER'S JOURNEY WITH SAS: ONE SMALL SAS FOR MAN...

AN OVERVIEW OF MY JOURNEY AND EXPERIENCES WITH
SAS AS SOMEONE COMING FROM OUTSIDE THE INDUSTRY

DALE ARMSTRONG

INTRODUCTION

About Me

- Statistical programmer (3.5yrs experience)
- Current employer: Sekharico Informatics Ltd
- Previous job: Production Scientist (lab work; drug production)
- First in-person PHUSE

Aim of Today's Talk

- To summarise the overall process of transitioning into this career and illuminate aspects of the experience that may be useful for others



BECOMING A PROGRAMMER: MY MOTIVATIONS

- Programming culture: unique, welcoming
- Working conditions: more flexible, better paid
- Dissatisfied and disillusioned with my job at the time
- Keen to learn a skill that would provide me with a valuable trade
- Just bought a powerful new laptop!

GETTING STARTED

- What could I already bring to the table?
- Remained in my lab role to support myself through early stages



FIRST STEPS INTO CODING: YEARS 1–2

- My first language: Python

Pros & Cons of Different Learning Resources

Online Sources

- Generally free
- Large selection
- No feedback
- Mixed success

Textbooks

- Better for fundamentals, depth and comprehensive explanations
- Excellent reference material
- Picking the right book can be hard
- Textbooks can fall out of date
- Feedback can still be an issue

FIRST STEPS INTO CODING: CONT.

- Coding Boot Camps

- High-intensity crash course
- Quick route to employment
- High price
- Not going at your own pace

Networking

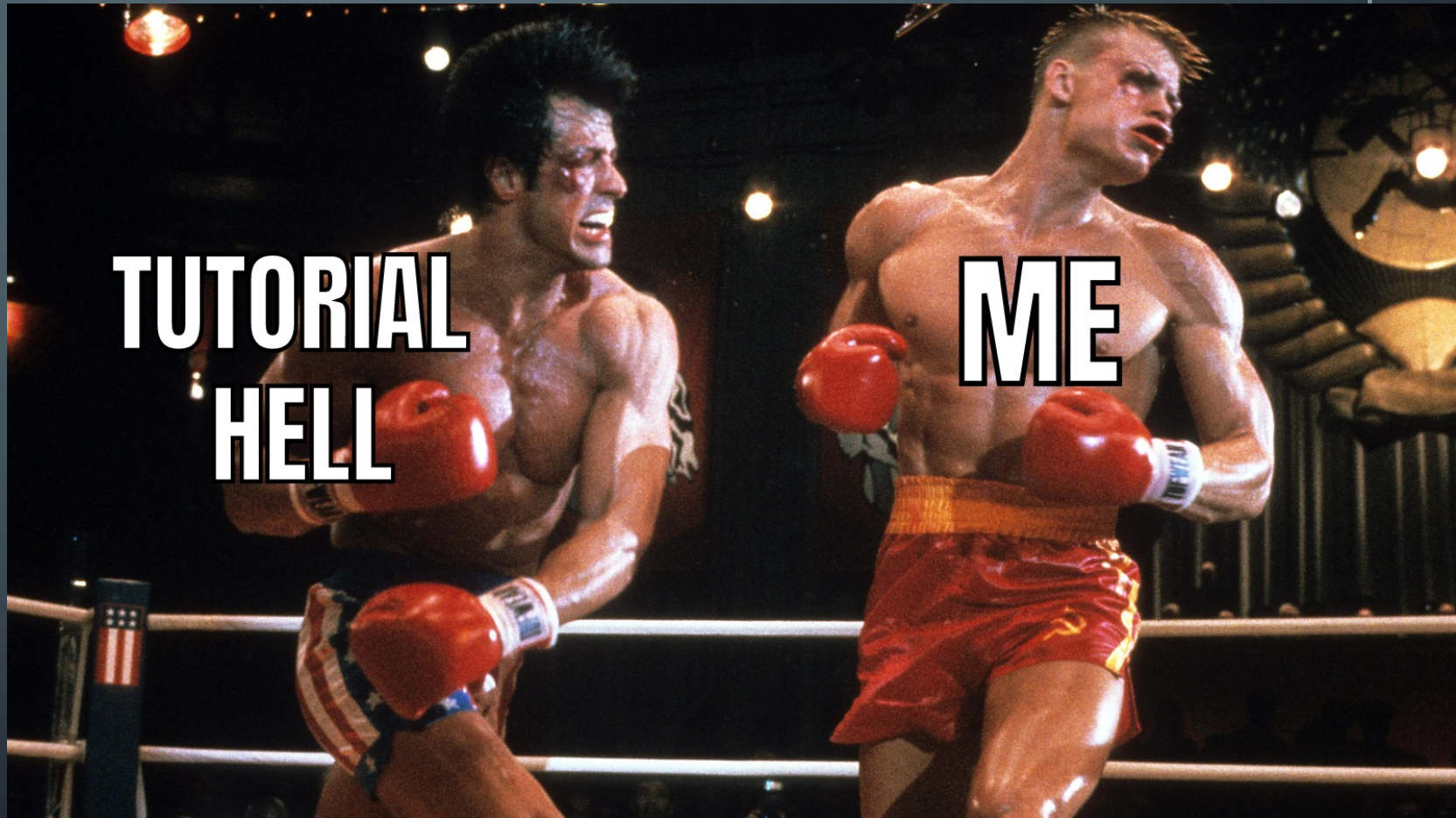
- Shows you what you're getting into
- Great for making connections and discovering vacancies
- Highlights gaps in knowledge
- You won't become a better technical programmer
- A lot of events won't apply to your particular interests

In Conclusion:

- I recommend starting with textbooks, transitioning to online resources whilst attending regular networking meets

HOUSTON, WE HAVE A PROBLEM

- Progress dropped off with usual learning methods
 - Struggled to find appropriately levelled projects
 - Problems started becoming too specific to find fixes for
- Where to go next?



MEETING A MENTOR

- Networking events paid off!
- Met Anil Sekhari at a coding meet
 - Experienced, well-connected SAS programmer
 - Agreed 1 yr of supported study
 - Plan after 1 yr: assess my progress and hopefully start employment
- Pros of Anil's mentorship:
 - Provided a structured training plan
 - Feedback became near-immediate
 - Can hold his drink well

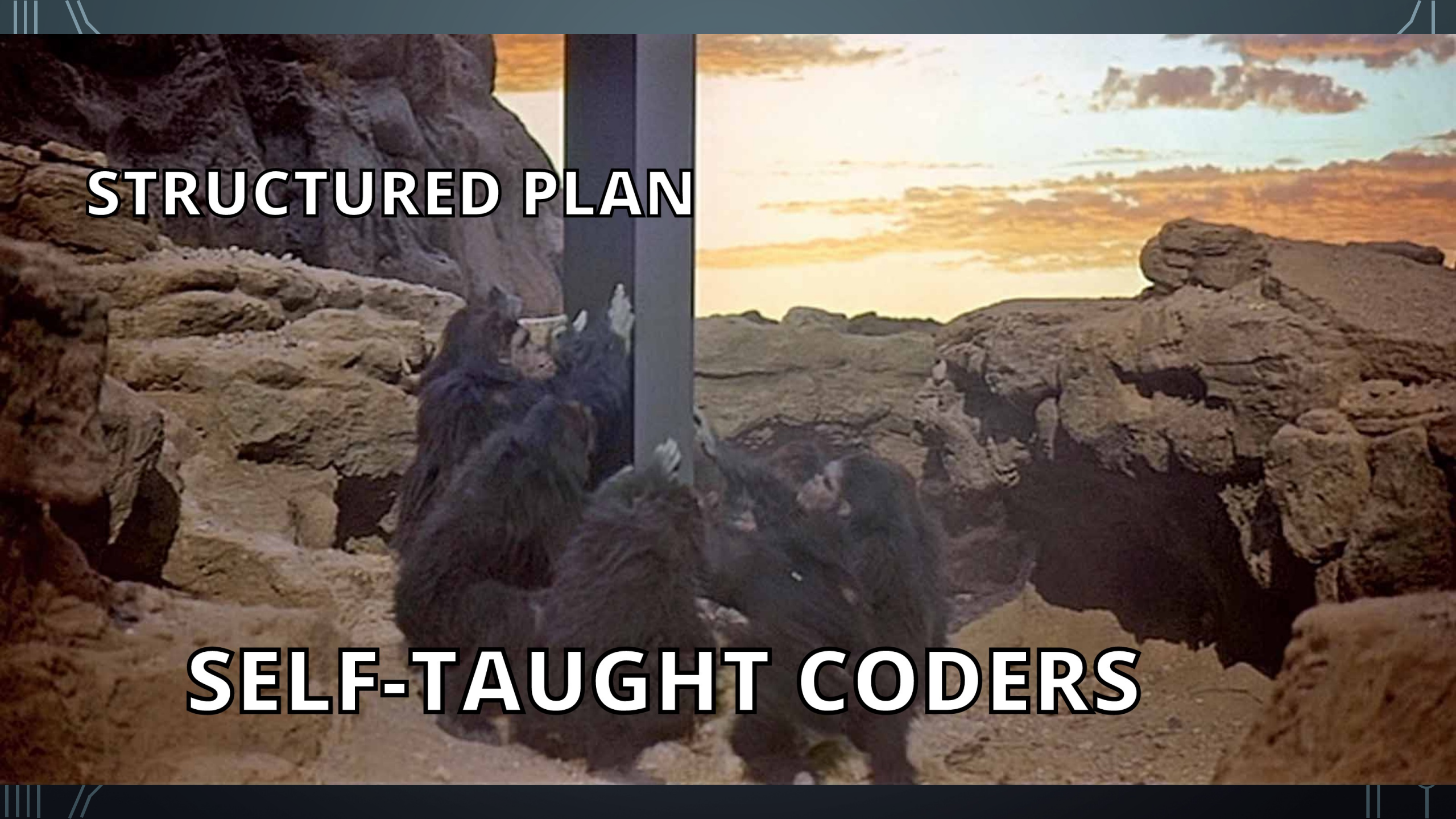
MENTORSHIP!

How I Improved

- Began to create simpler, cleaner code
- Learnt to identify pitfalls ahead of time
- Built understanding of best practice.
- Adjusted to handling complex tasks under pressure

Challenges We Faced

- Vast gap in knowledge and experience



STRUCTURED PLAN

SELF-TAUGHT CODERS

THE PLAN

Learning Content

- CDISC: Clinical Data Interchange Standards Consortium
- SDTM: Study Data Tabulation Model
- ADaM: Analysis Data Model
- TFLS: Tables, Figures and Listings
- Statistics: how to manipulate data into statistical models

Benefits

- Great overview of the study reporting process
- Smaller data sample size
- Real taste for the job
- Structured
- Easier to review progress

BECOMING A PROGRAMMER

- Quit my old job!
- Started at Sekharico Informatics Ltd as Junior Statistical Programmer



**WHERE WE'RE GOING, WE DON'T
NEED 5 YEARS EXPERIENCE**

FIRST CONSULTANCY

COVID-19 Respiratory Trial

- Small scale; 1 month long
 - My role: Production Programmer
 - Anil's role: Validation Programmer
- Handful of ADaM datasets and TFLs
- Good opportunity which ended successfully
- Helpful feedback re increasing work rate whilst maintaining quality

SECOND CONSULTANCY

Psoriasis Compound

- 1 yr contract
- Production Programmer
- ISS/ISE submission package
- FDA response work; multiple imputation; complex TFLs; statistical procedures
- Growing levels of responsibility

1ST DAY



**AFTER 1 YEAR
CONSULTING**



SECOND CONSULTANCY: WHAT I LEARNT

The role involves:

- Much more rewriting other's code than creating from scratch
- Constant pressure; continuous improvement
- Looking to co-workers (and Anil!) for support

I had to adapt to:

- Less time for self-study
- Keeping on putting myself forward for tasks
- Avoiding bad habits
- Applying my soft skills in a new environment

TO CONCLUDE

To New Programmers:

- Understand what you want out of programming
- Prioritise finding a programming network
- Start with a beginner-level book then extend into online resources
- When you're ready, see if you can find a mentor
- When in a role, engage with the team around you as a vital resource
- Lean into learning from your mistakes

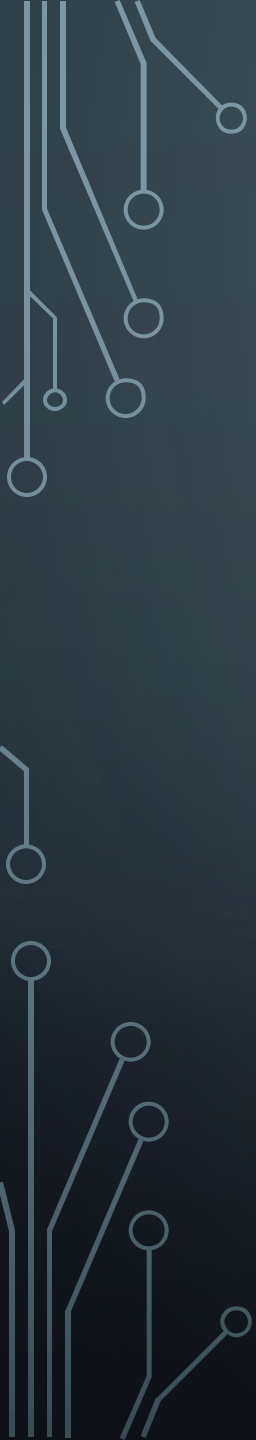
TO CONCLUDE

To Those Supporting New Programmers:

- Selecting a dedicated individual is key
- Appropriate pressure speeds progress
- Have expectations, and be open about them
- The first consultancy should be a joint one
- Understand their limitations

TO CONCLUDE VIA MEME





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