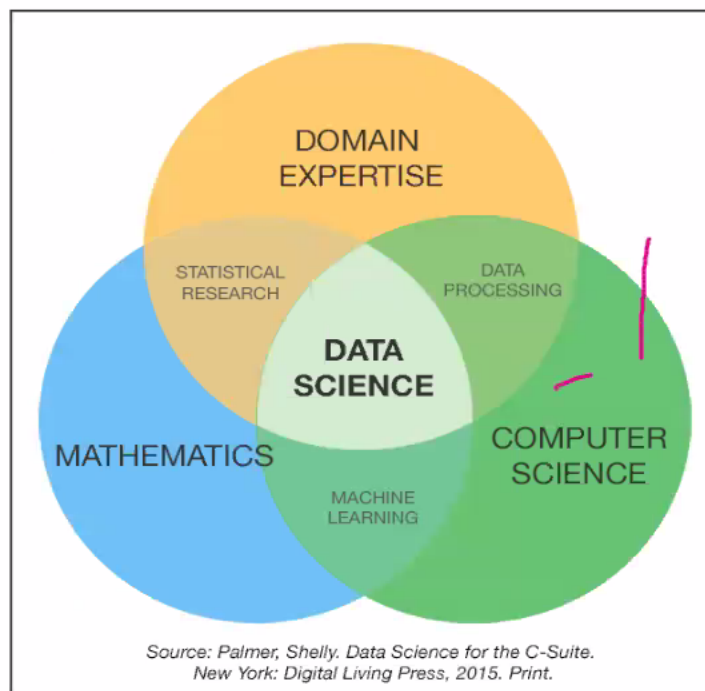
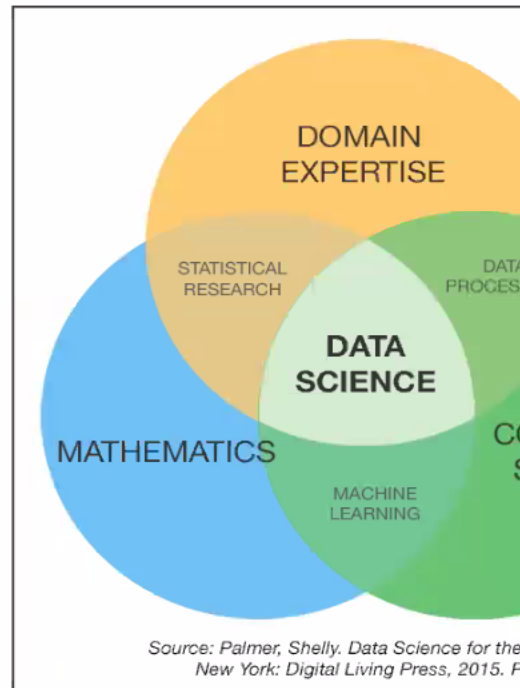


# What is Data Science?

---



# What is Data Science



## 1. Computer Science

Programming- P

Non programming- NP

Rule#1:

Goal of Programing-X software engineering

Goal of programming-> To solve a business problem

Collect data

Clean data

Transform data

Analyze data

Prediction

Data is the heart of programming in Data Science

Rule#2: Jack of all tools, MASTER ONLY ONE

Which tool should I master?

Python

R

SAS

Weka

Azure ML

Matlab

# 1990s Data Science

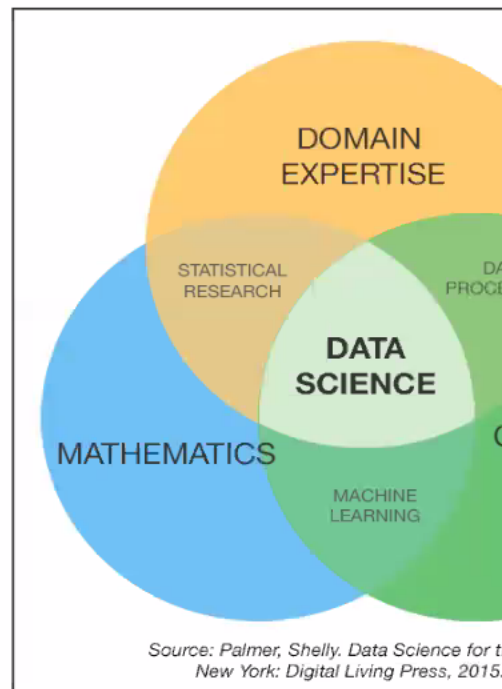
- Writing code in C/C++  
Logistic regression  
100 lines of code
- Working with flat files  
3-5 lines of code
- Even relational/SQL  
Rich ecosystem of libraries & packages  
Don't reinvent the wheel
- Using Matlab, IDL  
Syntax or business problem?
- Writing all algorithms  
Data manipulation- Pandas  
Data visualization- Matplotlib, bokeh, seaborn  
ML- > Scikit learn  
AI-> Tensorflow -> Computer Vision/ NLP



# What is Data Science?

Stats

DS IS



Descriptive Statistics-> To describe your data/ To tell your data story

Average, median, mode, s.d. , frequency

Data Scientist@Citibank

Build a ML model to predict whether a credit card is fraud or not

50 million credit card transactions

Analyze Data

Ratio of fraud vs non fraud transaction:

average fraud transaction vs average non fraud transaction value

Geographical spread

Offline vs online

Time of the day

Credit card type- IndianOil/ Visa/Mastercards

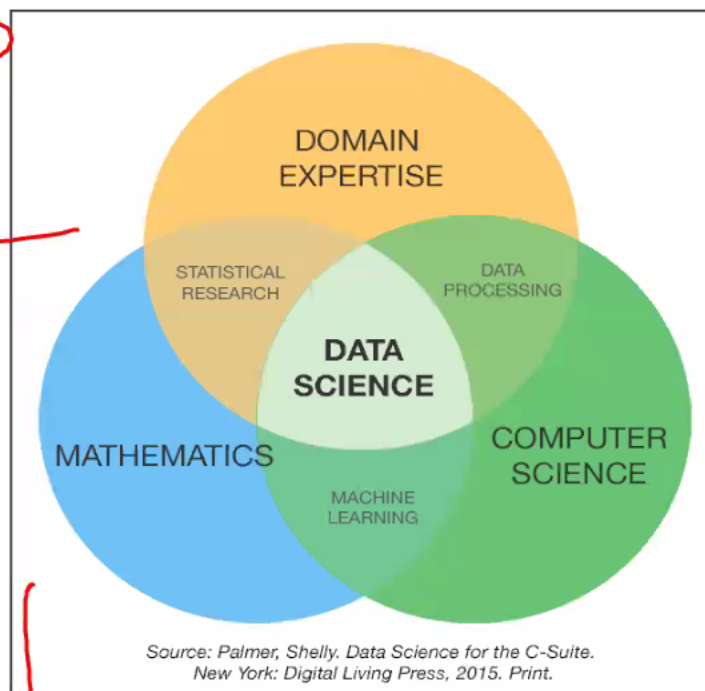
Data leader-> Ask questions

# What is Data Science?

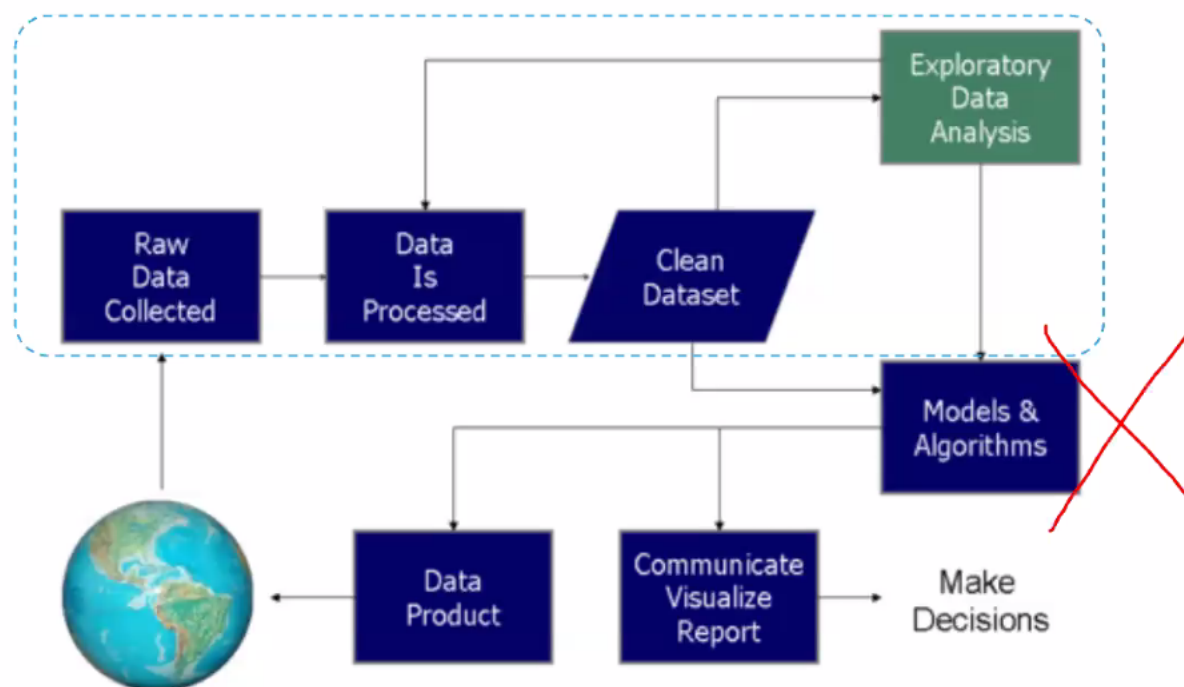
Stats

DS  
DA

IS  
ML



# Step 1: Learn to play with Data



International School of AI & Data Science

how can i get 2x hike

From Thothathiri to All panelists and attendees:  
am having 20+ year experience, will be  
getting same salary as Data Leader

From Anupam Sriv... to All panelists and attendees:  
yes

From Nirav to All panelists and attendees:  
yes

From Sasidhar to All panelists and attendees:  
newbie

From pratha pandey to All panelists and attendees:  
yess..

From Me to All panelists:  
i dont see all panelist and attendees...

From INSAID .co to All panelists and attendees:  
Chat is restricted for everyone, only  
panelists can see.

From Me to All panelists:  
np  
yes

From Rashmi to All panelists and attendees:  
Can't see screen  
IT yes heard  
data scientist  
P

From Me to All panelists:  
like  
heart of

From Rashmi to All panelists and attendees:  
love math

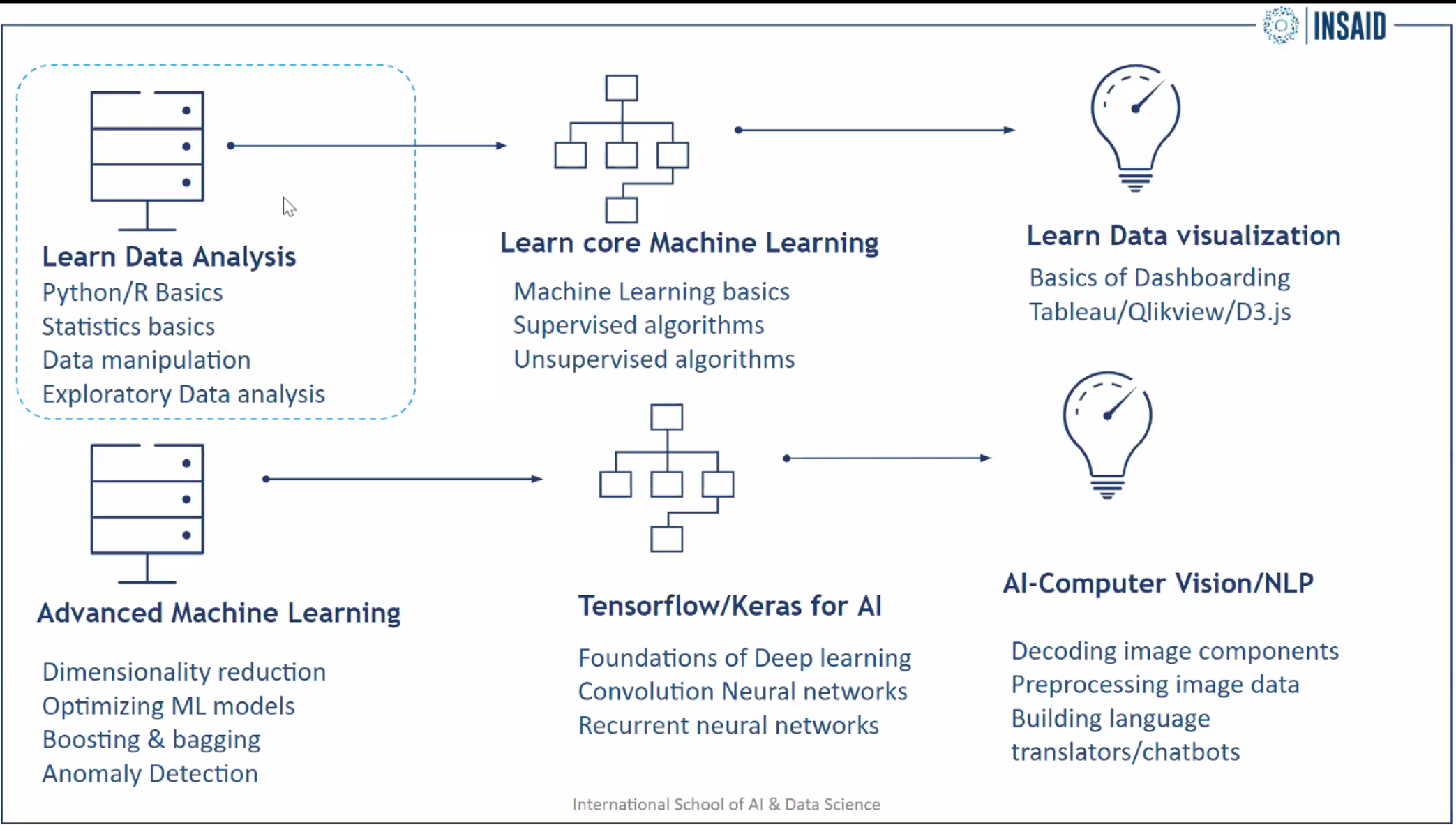
From Me to All panelists:  
yes SME

From Rashmi to All panelists and attendees:  
Analyze expense area

From Me to All panelists:  
yes

To: All panelists

Your text can only be seen by panelists



how can i get 2x hike

From Thothathiri to All panelists and attendees:  
am having 20+ year experience, will be getting same salary as Data Leader

From Anupam Sriv... to All panelists and attendees:  
yes

From Nirav to All panelists and attendees:  
yes

From Sasidhar to All panelists and attendees:  
newbie

From pratha pandey to All panelists and attendees:  
yess..

From Me to All panelists:  
i dont see all panelist and attendees...

From INSAID .co to All panelists and attendees:  
Chat is restricted for everyone, only panelists can see.

From Me to All panelists:  
np  
yes

From Rashmi to All panelists and attendees:  
Can't see screen  
IT yes heard  
data scientist  
P

From Me to All panelists:  
like  
heart of

From Rashmi to All panelists and attendees:  
love math

From Me to All panelists:  
yes SME

From Rashmi to All panelists and attendees:  
Analyze expense area

From Me to All panelists:  
yes

To: All panelists

Your text can only be seen by panelists



	Certificate in Data Science Foundation®	Global Certificate in Data Science®	Global Certificate in Data Science & AI®
Term 1	Data analysis with Python	Data analysis with Python	Data analysis with Python
Term 2	Data visualization & EDA	Data visualization & EDA	Data visualization & EDA
Term 3	ML Foundation	ML Foundation	ML Foundation
	Minor Project	Minor Project	Minor Project
Term 4		ML Intermediate	ML Intermediate
Term 5		ML Advanced [Elective-1] Data analytics with R [Elective-2] Data visualization with Tableau [Elective-3]	ML Basics for AI(Recap)
Term 6		Capstone Project(Data Science)	Capstone Project(Data Science)
Term 7			Tensorflow & Keras for AI
Term 8			Deep Learning foundation for AI
Term 9			NLP-1
Term 10			Computer Vision-I
Term 11			Specialization: NLP-II/Computer Vision-II
			Capstone Project(AI)



# Fee after 70% tuition waiver

