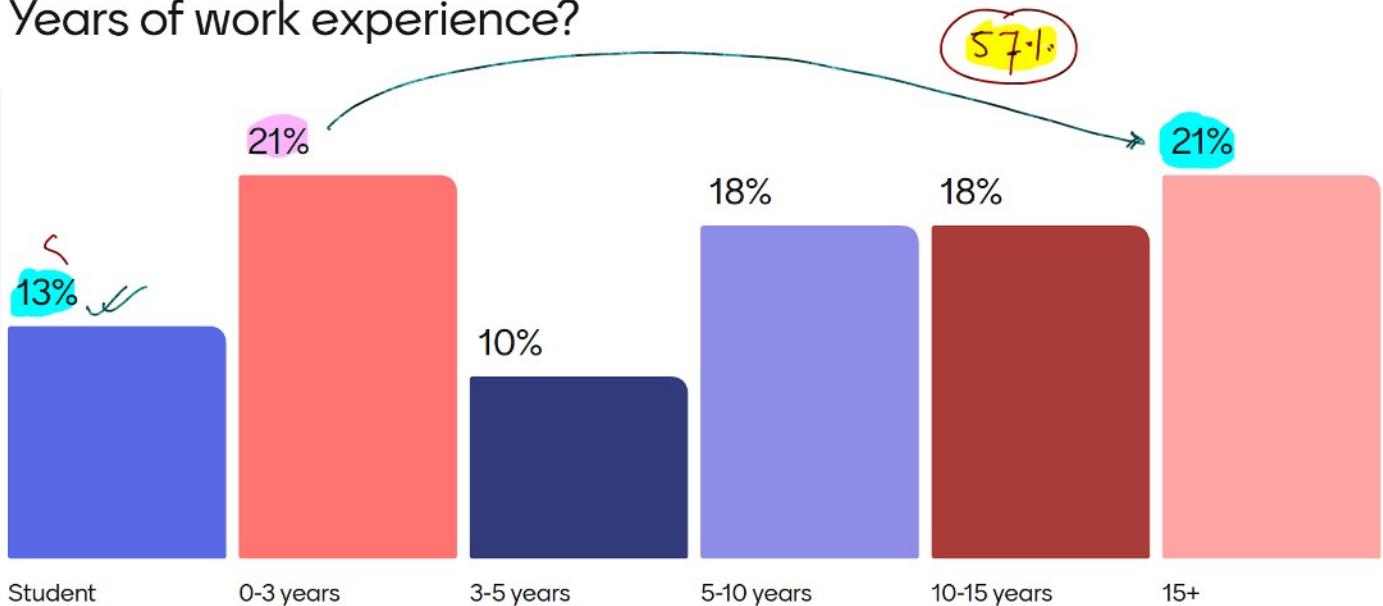


What's the end objective for joining this course ?

- upskilling
- career transition
 - ↓
 - get a job



Years of work experience?



Who am I?

07 September 2025 09:48

AKASH PUSHKAR CHARAN aka APC

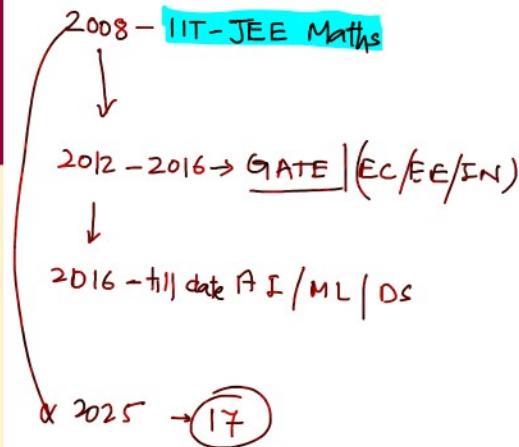
Quick witted | Tech-Savvy | Observer



- IIT Kanpur Alumnus
- Working as Principal Data Scientist with Accenture Strategy & Consulting

-  9+ years of Industry experience of delivering multiple data science projects across industries
-  15+ years of experience training & mentoring
-  Taught 30000+ GATE Students
-  7000+ career transitions into Data Science roles

"It's not who I am underneath but what I do that defines me"



The diagram shows a vertical timeline with arrows pointing downwards. It starts with "2008 - IIT-JEE Maths" at the top, followed by "2012 - 2016 → GATE (EC/EE/IN)" in the middle, and "2016 - till date AI / ML / DS" at the bottom. A curved arrow points from the bottom text to the year 2025, which is enclosed in a circle with the number "17".

<https://www.linkedin.com/in/akash-pushkar-04642925/>

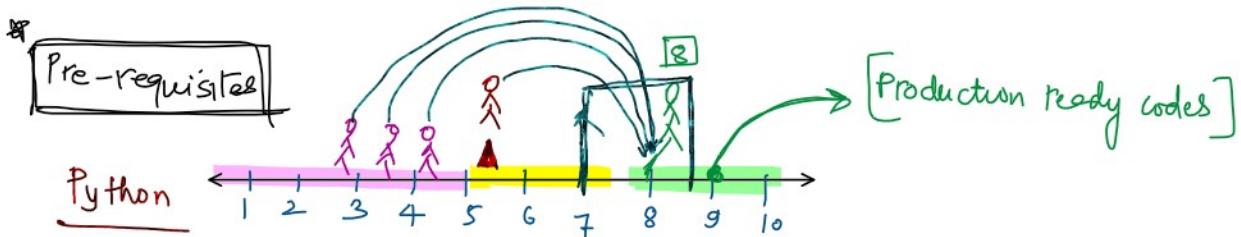
[How to Become a Data Scientist in 2024 | Data Science Skills, Job Description, Salary | Intellipaat](#)



The thumbnail for the video 'Busting Data Science Myths' features two men sitting on a black sofa against a dark background. The man on the left is wearing a blue and white striped shirt, and the man on the right is wearing a red hoodie. Above them, the title 'BUSTING DATA SCIENCE MYTHS' is displayed in large, bold, white letters. Below the title, smaller text reads 'DATA SCIENCE SKILLS, JOB DESCRIPTION, SALARY 2024'. The Intellipaat logo is visible in the top right corner.

Setting up guidelines & expectations

07 September 2025 10:28

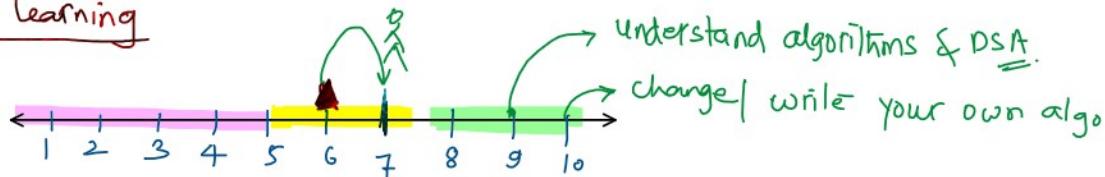


- Basics -
- DOPs -
- Numpy, Pandas, etc..

Daily → [1 hr. of consistent coding]

- share some resources (materials)
- APC needs to share.

Machine Learning



① Intuition behind ML algorithm

② Mathematics behind ML algo.

- calculus
- Linear Algebra
- Probability & Random Variable
- statistics

③ Hands on exercises | coding

"Industrial/ real projects"

→ "case-studies"

→ Problems from Kaggle / any public repo.

→ summarize → pros

→ cons

(gtg) : "good to go"

Pre-requisites from prior sessions

✓ ① Bias and Variance

- overfitting and underfitting

✓ ② Gradient Descent Algorithms (GD_{Algs})

- Batch
- Mini-Batch
- Stochastic

* Partially done only for some folks.

↓
Needs to be done - APC.

✓ ③ User-defined functions (UDFs) → to mimic any algorithm

✓ ④ OOPs Principles

Promise: we'll write our own Neural Network Model by hands

- Excel worksheet
- Python
- OOPs
- NumPy
- Pandas
- Visualization
- zip()
- apply()
- matplotlib
- seaborn
- plotly (resources | materials)

certain Guidelines

① Respect time and money.

② [DO NOT MISS A SINGLE LIVE SESSION.]

Wedding video: A) Once

B) twice

C) thrice

D) more than 4 times

③ Dedicated Doubt slots (DDS)

→ after the break (10-15mins)

→ after the session ends (10-15mins)

Talk to me

④ Industry based training

- real world examples
- drop startup ideas
- detailed discussions.

Course Structure

07 September 2025 09:48

[8-10 weeks] : Tentative



Module #1 Introduction to deep learning (DL)

- Difference b/w ML, DL, AI, GenAI, LLM, Agentic AI, DS, RAG, NLP
- Use cases of DL in the industry
- $(\text{domain} \underset{\text{wise}}{\leftrightarrow} \text{examples})$
 - Supply chain
 - Healthcare
 - BFSI etc.

Module #2 Introduction to Artificial Neural Networks (ANNs)

- connecting the dots between the human nervous system and neural networks] Intuition
- gradient descent algorithms (GDAs)
 - Batch
 - Mini-Batch
 - Stochasticwriting our own codes for GDAs leveraging maths
- Single Layer Perceptron (SLP)
- Multiple Layer Perception (MLP)
- Parameters in ANNs → weights
→ biases
- Activation Functions (AFs)
 - relu, sigmoid, softmax, tanh etc.

Building a proper ANN from scratch

- using IRIS dataset



Module #③ Neural Network Framework

- Introduction to TensorFlow
- Introduction to Keras

} (sequential modelling Approach)
↙ ↘

MNIST database: handwritten digits recognition hands on.

Module #④ Convolutional Neural Networks (CNNs)

Module #⑤ Natural Language Processing (NLP)

Module #⑥ Recurrent Neural Networks (RNNs)

Module #⑦ Long short term Model. (LSTM)

- Miscellaneous topics