

## AI ENGINEERING

### FELLOWSHIP



Live Zoom Classes



Mentorship with experts



3 months timeline



Industry ready portfolio



## Al Engineering Fellowship

The fellowship is designed to help aspirants pick up business fundamentals, be a better problem solver and an excellent communicator.



#### Live Learning with Hiring Managers

Learn the fundamentals of business and analytics directly from hiring managers at top tech and consulting companies.

## Mentorship & Career guidance with Experts

Get mentored by industry experts on how to go about building a successful career at top companies.

## Case Study driven Job simulations

Get hands-on experience by solving real-world case studies faced at fortune 500 companies & startups.

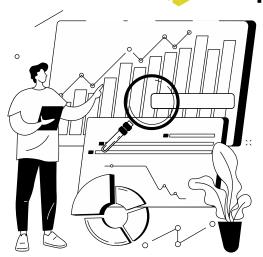
## Mock Interviews & Portfolio Building

Get access to 1:1 mock interviews, optimized resume writing, and industry-ready portfolio building.



# Learning Outcome

With this fellowship, the learners are expected to pick up business fundamentals, be a better problem solver and an excellent communicator.



## Build depth in business understanding

Build an in-depth understanding of business goals to align their analytical efforts with strategic objectives.

## Solve problems in a step by step framework

systematically break down problems, identify root causes, generate potential solutions, and evaluate their effectiveness with step-by-step framework

## Build proficiency in tools and techniques

Efficiently tackle complex tasks, drive innovative solutions, and improve overall performance with latest tools and techniques.

### Learn to communicate with confidence

Effectively convey your insights and drive impactful discussions in both professional and personal settings.



#### WEEK 01

#### Business Fundamentals

- Business Models and Customer Segmentation
- Products, Value Proposition, and Distribution Channels
- Revenue Streams and Cost Structures
- Business functions and their objective
- North Star metrics and analytics use cases



#### Case Study:

Dissecting business model of Indian unicorns

#### WEEK 02

#### Problem Solving Approach

- Structured Problem
   Solving Canvas
- Customer empathy& Design thinking
- Human-Centered
   Solution Design
- Stakeholders
   Communication



#### **Case Study:**

Designing a data/AI products

Your Instructor



**Tanoy Dewanjee** 

AVP, Data Science Chapter, HSBC



#### WEEK 03

#### Essential Statistics for Business Insights

- Descriptive & Inferential statistics and its application
- Probability fundamentals
- Probability distributions
- Hypothesis Testing & p-Value, significance level
- Correlation analysis
- ANOVA and its applications



#### Case Study:

Quick commerce assortment analysis

#### WEEK 04

### Feature Design & Insights with A/B Testing

- Selection of the right business metrics to optimize
- Identification of the right customer through cohort analysis
- Inferential Analysis of Launch Decisions
- Post-launch monitoring & iteration mechanism



#### Case Study:

Lifestyle brand's landing page launch strategy

Your Instructor



# Srinivasan B Senior Data Scientist GoTo



#### **WEEK 05**

### Intro to Business Insights with Python

- Data structures lists, tuples, dictionaries, sets, etc.
- Working with Numpy indexing, slicing, manipulating, etc.
- Working with pandas reading & writing files, statistical analysis
- Working with matplotlib & seaborn - charts, plots, subplots, etc.



#### Case Study:

Quick commerce assortment analysis

#### WEEK 06

#### Advanced Business Insights with Python

- User journey mapping and right problem identification
- Banking credit risk fundamentals
- Advanced data wrangling and EDA techniques
- Write reusable functions to conduct analysis at scale
- Detailed insights report writing for stakeholders



#### Case Study:

Loan application quality analysis for an NBFC

Your Instructor



#### Sameer Dubey

Data Science Manager, Home Credit



#### WEEK 07

#### Fundamentals of Machine Learning

- Defining the problem scope and evaluation framework
- Exploratory data analysis to find out insights
- Feature engineering and scaling
- Regression analysis
- Model monitoring and feedback incorporation



#### Case Study:

Credit decisioning system for an NBFC

#### **WEEK 08**

#### Advanced Machine Learning Techniques

- Ensemble learning –
   Bagging, boosting & model stacking
- Hyperparameter tuning grid search, random search, etc.
- Optimizing for accuracy, latency, and explainability
- Handling model & data drift and updates



#### Case Study:

Valued shopper retention for an e-commerce

### Your Instructors



Tanoy Dewanjee

AVP, Data Science

Chapter, HSBC



Sameer Dubey

Data Science Manager,

Home Credit



#### **WEEK 09**

#### Fundamentals of Deep Learning

- Layers and architectures of deep networks
- Backpropagation and gradient descent
- Hyperparameter tuning and regularization
- Sequential modeling techniques (RNN, LSTM)



#### Case Study:

Brand's social listening from the Twitter feed

#### **WEEK 10**

## Generative AI: The Art of Prompt Engineering

- NLP and LLM Fundamentals
- Transformer architecture explanation
- Efficient Prompt Engineering techniques
- Prompt tuning & automation
- Working with OpenAI and Opensource LLM models



#### **Assessment:**

Negative news screener for fraud alerts

Your Instructor



#### Kshitij Jha

Sr. AVP, Data Science Chapter, HSBC



#### **WEEK 11**

## Generative AI: Building RAG Systems

- RAG architecture understanding
- Design and implement the RAG pipeline
- Finetune and evaluate model performance and accuracy
- Navigating common challenges of the RAG system



#### Case Study:

Develop and deploy
PrivacyBot for a website

#### **WEEK 12**

## Interviews Prep & Portfolio Building

- Building Project Portfolio & Optimizing Your Resume
- Business Case Study Interview Questions
- Technical Interview Questions
- Behavioral/fitment round interview questions

1:1 Session

#### **Assessment:**

Exit exam, Resume feedback & Mock interview

Your Instructor



Kshitij Jha

Sr. AVP, Data Science Chapter, HSBC



# Master what matters

#### Concepts you'll learn



Business fundamentals



Problem Solving Frameworks



Insights generation



GenAl Applications



Model Building



Stakeholders communications

#### Tools you'll master



**PyTorch** 



Prompt Engineering



llamaindex



**Hugging Face** 



**VectorDB** 

**Python** 

## Fellowship Experience

Learn with the best and unlock the career opportunity in the most structured and guided manner!





#### Live Classes

Every Saturday & Sunday From 10 a.m. to 1 p.m. (IST)



## Mentor Connect

Once every 2 weeks

Duration for 1 hour



### Doubt Support

Every Wednesday From 8 p.m. to 9 p.m. (IST)



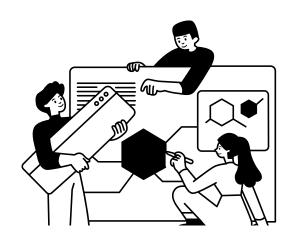
#### Mock Interview

Once every 6 weeks Duration for 1 hour

**Enroll Now** 

# What Our Fellows say about us

Don't trust us. Listen to the fellows from previous cohorts.



Thank you for the insightful sessions!
The case study shared was incredibly informative and addressed realworld problems. It provided valuable practical knowledge.



**Gaurav Kumar** Students, IIT Guwahati Engaging content, expert guidance, and insights into a hiring manager's perspective made the session outstanding.



**Srishti Shikha**Technology Consultant

Attending the bootcamp was great learning experience. Highly recommended for anyone looking to accelerate their career in AI/Data Science.



**Bibhuti Jha**AVP, Business Analytics

A very insightful session indeed. Looking forward to more case studies.



**Suryansh Abhijit** Students, MIT Manipal

**Enroll Now** 



### **FAQ**

#### What is the Descipr Fellowship?

Our Fellowships are 12-16-week online courses designed to help learners transition into careers in AI and Data Science. The entire program is conducted via live sessions on Zoom. Our instructors and mentors, who are hiring managers at top companies, will teach you the fundamentals of data science, assist with case studies, resolve doubts, and provide valuable feedback.

#### Who is eligible to apply for the Descipr Fellowship?

This fellowship is open to anyone seeking to transition into a new role, with no requirements for minimum experience, CGPA, or specific degree or specialization.

#### Are there any costs associated with the Fellowships?

Apart from the enrollment fees, there are no other hidden costs associated with the fellowship.

#### What if I miss a live session?

Recordings of all live sessions with instructors will be available. Additionally, please note that our sessions are designed to be participatory and interactive, so we recommend attending all of them to gain the most benefit.

I'm pursuing my undergrad course. Am I eligible to apply?

Yes, you can apply for the program



**Request 1:1 Guidance** 



Whatsapp Us



### **FAQ**

### What are the benefits of being a Fellow in the Descipr Fellowship program?

As part of this fellowship, you'll have the opportunity to (i) learn from industry expert instructors and mentors, (ii) engage in job-simulation projects, (iii) receive one-on-one mentorship and participate in mock interviews with hiring managers, (iv) gain exclusive community access, and (v) build a career portfolio that will set you apart.

#### What is the Exit exam?

At the end of the fellowship, we will conduct an online test to assess your learning across all courses. After the test, our mentors will connect with you to provide feedback on your career planning and support your professional growth.

#### What's the format of the Exit exam?

The exit exam will comprise a problem statement along with scenario-based questions to assess your understanding and readiness for the professional world.

#### What is the application process for the Descipr Fellowship?

There's no application process for enrolling in our Fellowships. You can simply click on Enroll Now and make the payment to enroll for the fellowship.



Request 1:1 Guidance



Whatsapp Us



### **FAQ**

### What are the key responsibilities of a Fellow during the program?

You will be expected to review weekly learning materials on the Descipr website and submit your work for the weekly milestone, which involves solving a job-simulated project related to that week's topic. At the end of the fellowship, you will be required to take an exit exam.

### What kind of support and resources will Fellows have access to during the program?

During your weekly live sessions with instructors, you'll benefit from insights provided by industry experts. Each learner is also paired with a mentor who will assist with case study analyses, resolve any doubts, and help plan your career path. Additionally, each week you'll receive learning materials on that week's topic and access a real-world problem statement as part of your weekly milestone.

#### If I am unable to attend the program or need to pull out at the last minute, will I get a refund?

Refund requests can only be submitted up to 2 weeks before the start date of the Fellowship. If the reason for the request is deemed valid, we will issue a full refund. Requests made after this deadline will not be processed. The Descipr team reserves the right to make the final decision on all refund requests.



Request 1:1 Guidance



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