

#### EXECUTIVE PROGRAM IN

# DATA SCIENCE & A.I.

Designed for Data
Science & A.I. Enthusiasts
to redefine the Future of
Analytics and A.I.

DURATION
12 MONTHS

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#### **About**

#### **Meritshot**

Meritshot is an online education platform to help data science enthusiasts and working professionals looking to transition their careers in the Data Science and AI Field. We foster a flourishing community of working professionals who wish to upskill themselves.

At Meritshot, we are working towards transforming the traditional approach of learning with the modern way of learning where individuals learn experientially with ideas and creativity coming from top industry mentors and coaches. Based on our market research and conversation with industry veterans, we have identified Data Science as one of the sectors with a very huge demand and very low supply.

Our vision is to design and deliver a high-octane online Executive program in Data Science to feed the supply-demand imbalance surge in India and make India a global hub for data science. If you are reading this, you may wish to accelerate your career in Data Science with Meritshot, we promise to equip you with the perfect mix of business understanding and technical skills to help you achieve the same.

Roshan Sharma
Founder & CEO
Meritshot

## Data Science Emergence The Modern Era

In the modern era, data has become one of the most valuable resources, and the field of data science has emerged as a powerful tool to unlock its potential. Data science is a multidisciplinary field that combines techniques from computer science, mathematics, and domain expertise to extract insights and knowledge from large and complex data sets.

With the increasing availability of data and advancements in technology, data science has gained immense importance across various industries and has revolutionized the way organizations make decisions, solve problems, and innovate.



Technological advancements also played a crucial role in the emergence of data science. The rapid development of computing power, storage capabilities, and data processing tools paved the way for handling large and complex data sets. Additionally, the rise of the internet, social media, and connected devices generated massive amounts of data, providing new opportunities for data science to thrive.

## Why data science

#### with Meritshot?



#### **Certification Program**

Get certified on successful completion of the Program in Data Science and AI.



#### **Domain Specialization**

Get full fledged experience of a specific domain to showcase a focused Data science portfolio.



#### **Dedicated Mentorship**

Get dedicated mentorship on every step of learning Data science throughout program.



#### **Personalized Evaluation**

Get personalized evaluation on every assignment and project by domain experts.



#### **Personalized Projects**

Work only on personalized Portfolio projects that suits your work profile and background.



#### **Amazing Job Offers**

Great Job Offers after successful completion of the Data science and AI Program.

## **Positions** Offered ML Engineer Data Scientist Data Analyst Data Engineer NLP Engineer Business Analyst Data Architect **Database** Adminstrator Statistician

### Learn with

## **Top Industry Experts**



Saurabh Daund
Data Scientist
Aidetic



Sakshi Pandey
Principle Researcher
Cialfor Research



**Dr. Shweta Singh**Associate Professor **Delhi Univesity** 



S.D. Siddiqui
Associate Professor
Delhi University



Jilu Balakrishnan AI Specialist ISDC GLOBAL



John Martini
Data Evangelist
Merishot



Heena Arora
Data Scientist
PwC



Bharath Reddy
Data Scientist
Meritshot

## Program Curriculum

## **Preparatory Course**

EXCEL FOR DATA ANALYTICS	Statistical Functions, Logical Functions, Mathematical Functions, Lookup Functions, Charts, Dashboards, What-if Analysis, Forecasting, Linear Regression Analysis etc
TABLEAU AND POWER BI	Charts, Maps, Level of Details Expressions, Table Calculations, Aggregations, Granularity, Data Extracts, Filters, Dashboards and Storyboards in Tableau & Power Bl.
PYTHON AND R PROGRAMMING	Variables, Operators, Strings, Data Structures, Loops, Conditionals, Functions, Regular Expressions, OOPs, Space & Time Complexity in Python, and Intro to R Programming

## Data Analysis Course

STATISTICS & HYPOTHESIS TESTING	Descriptive Statistics, Basic and Conditional Probability, Inferential statistics, Normal distribution, Hypothesis testing, t test, z test, ANOVA, chi-squared
DATA ANALYSIS AND VISUALIZATION	Introduction to Numpy, Pandas, Matplotlib, Seaborn, Basic Charts for Advanced Data Visualization, Interactive Visualization, 3D Charts and Visualization.
DATA CLEANING, PREPARATION, & PROCESSING	Missing Values treatment, Outliers treatment, Categorical encoding, Data Manipulation functions, Data transformations, feature engineering, and feature scaling.

## Curriculum

## Machine Learning Course

SUPERVISED LEARNING	Linear Regression, Logistic Regression, KNN, SVM, Decision Trees, Random Forests, Boosting Algorithms, Imbalanced ML, and Advanced ML Modelling Techniques.
UNSUPERVISED LEARNING	K Means Clustering, Hierarchical Clustering, Dimensionality Reduction, Principal Component Analysis, Linear Discriminant Analysis, Clustering metrics etc.
TIME SERIES & RECOMMENDER SYSTEMS	Time series fundamentals, Introduction to AR, MA, ARMA, ARIMA, SARIMA, ARIMAX, SARIMAX Models, Introduction to Recommender systems using Surprise Package.

## Big Data & SQL Course

INTRO TO MYSQL AND DATABASES	Database fundamentals, DDL, DML, DQL Queries, SQL Joins, Sub queries, Set operations, Accessing databases, Loading Tables, Intro to Spark for Big Data.
QUERY ANALYSIS IN PYTHON	Introduction to Query analysis in Python using Pandas, and Pyspark library. Exploring the pyspark library to execute any kind of query in Python Programming.
INTRO TO SPARK FOR BIG DATA	Introduction to Big Data, and Spark Architecture system, Installation and set- up of Spark. Big Data Analysis, and Execution of Machine Learning Algorithms.

## Curriculum

## Model Deployment Course

CLOUD & DEVOPS	Cloud infrastructure, DevOps practice, and Containerization, Microservices architecture, CI/CD, and Scalability and elasticity, Monitoring, logging, Security etc.
REST API & FLASK	REST API for data retrieval interaction. Flask basics: creating lightweight web applications for ML deployment and Integrating ML models with Flask for real-time predictions etc.
MACHINE LEARNING PIPELINE S	Model selection, Hyperparameter tuning, Cross-validation, Model training, Model evaluation, Deployment strategies, Monitoring and maintenance, Workflow optimization etc.

## Artificial Intelligence Course

INTRO TO DEEP LEARNING	Neural Networks, Backpropagation, CNNs, RNNs, Transfer Learning, Generative Models, Autoencoders, Reinforcement Learning, Optimization Algorithms etc.
INTRO TO NLP & TEXT ANALYTICS	Tokenization, NER, Sentiment Analysis, Word Embeddings, Topic Modeling, Language Models, Text Preprocessing, Information Extraction, Text Mining Techniques etc.
INTRO TO COMPUTER VISION	Image processing, Object detection, Feature extraction, Image segmentation, Facial recognition, Optical character recognition (OCR), Pose estimation, 3D vision etc.

#### Domain

## Specialization



BANKING FINANCE & INSURANCE You will work on Projects such as Churn Analysis, Risk-Reward Analysis, Stock Market Analysis and Fraud Analysis to understand core BFSI Concepts.



ECOMMERCE AND MARKETING You will learn Customer lifetime Analysis, Ad Campaign Analysis, Market Basket Analysis & Dynamic Pricing from this segment.



HEALTH CARE AND PHARMACY You will learn Payer and Provider Analytics, Analytics used in Pharmaceutical Industry to understand core Healthcare Concepts.



HUMAN RESOURCES & OPERATIONS You will learn Attrition Analysis, Promotion Analysis, Productivity Analysis & Resource Optimization to understand core BFSI Concepts.

## Capstone

## **Projects with AI**



MODEL DEPLOYMENT You will get to work on Machine Learning Model Deployment using **Rest APIs and AWS EC2** to facilitate an ML Model to an end user.



INTRO TO

You will work on Part of speech tagging, Named Entity Recognition, Topic Modelling, Text summarization, and Text Classification.



DEEP LEARNING

You will get to work on ANN, CNN, and Various Important CNN Architectures crucial for solving high-level problems.

## **Industry Projects**

## & Case studies



#### Climate Change Impact on Global Food Supply Chain

Frequent Climate change and irregularities are big challenging environmental issues. These irregularities in climate divisions are drastically affecting the human lives residing on the Earth

#### Keyword analysis and generation for google ads

Optimize search engine marketing campaigns by identifying relevant keywords for Google Ads to improve ad targeting and increase visibility, clicks, and conversions.

#### Quora Insincere Questions Classification analysis

Enhance content moderation on Quora by using ML algorithm to classify and filter out insincere questions to maintain the integrity of the platform and provide a better user experience.

#### Cabs Trip and Travelling duration Prediction

Predict the duration of cab trips using machine learning to optimize route planning, improve customer satisfaction, and enhance operational efficiency in the transportation industry.

## **Industry Projects**

#### & Case studies



#### Product Prices Suggestions for Online Sellers

Provide online sellers with data-driven price suggestions using machine learning to optimize pricing strategies, increase sales, and maximize profits in the competitive e-commerce market.

#### Demand Forecasting for an Ecommerce Giant

Forecast demand for a giant ecommerce, enabling effective inventory management, reducing stockouts and overstocks, customer satisfaction, and optimizing supply chain operations.

#### Recommend products to most suitable customers

Utilize personalized recommendations based on user behavior and preferences using ML to improve user experience, increase engagement, and drive sales for retail and e-commerce.

#### Traffic Signs Classification using CNN

Accurately classify traffic signs using ML to enhance road safety, assist in autonomous driving, and improve traffic management and enforcement in transportation systems.

## Libraries &

### **Tools Covered**















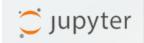


























































#### **Outcomes**



- In-depth knowledge of Data Science Concepts, Data Cleaning, Processing, ML, DL, and NLP algorithms.
- **Hands-on Experience** with advanced Data Science and Business Intelligence Tools and Techniques.
- Ability to solve Real-world Data Science problems and making data-driven decision making for optimized results.
- Networking Opportunities with fellow students, faculties, Domain Experts, Seasoned data Science Professionals.
- Enhanced Career Opportunities, as demand for Data Science professionals is very high across all the Industries.



#### Career

## Support



#### **Get Ready with Domain Experts:**

Learn from top Data Science Educators with domain expertise through a Live Online classroom. 24X7 Support from Teaching Assistants for Help in Assignments, Discussions, and Doubts Resolutions.

Industry Leaders for Professional Grooming: Know what's Happening inside the industry, and What's really required to make it through by engaging with Data Scientists and accompany them with sessions on Hiring, Day- to-Day Life of a Data Scientist/Data Analyst etc.

#### Benefit of Networking with Professionals:

Grow and Develop your Career with the Help of similarly motivated and Highly energetic Peers. Get to know How our Alumni Started their Career in the Emerging Field of Data Science and Artificial Intelligence.

#### 100 % Career Assistance and Lifetime Career Support:

Get Guaranteed Job Opportunities from Our Partners from Top MNCs and Startups such as American Express, Oracle, Alphabet Inc., IBM, Salesforce, Intel, Capital One, Amazon, VMware etc.

## Hiring

#### Partners



































Deloitte.



























#### **Details**

#### Program Highlights

- **600+ Live Training Hours** Get Trained by seasoned Data Science and AI Professionals and Experts throughout the course for over 600+ Hours.
- 300+ Hiring Partners Get Access to the Huge spectrum of Hiring Partners Including both Startups and MNCs across the Country from Various Industries.
- 40+ Tools Covered Get Professionally Trained on more than 40+ Popular and Highly Demanded Tools and Libraries.

#### **Program Fees**

\$3990/-

Flexible Financing Options (EMI) at 0% Interest rates on EMIs.

#### **Contact Support**

For further details, contact us at: +17245802680 or Mail us at support@meritshot.com