

# **Data Science**



# & It's Applications

Certification 2-8 Weeks / 30-40 Hours Industry ready exhaustive program

# Internship & Training Program

Make Projects & Get Trained



www.eduvitae.in | +91-8168123648 | contact@eduvitae.co.in



# About EduVitae Services

**EduVitae Services**, run by **IITians & industry experts**, is a renowned provider of education, training, research and development programs, with a large presence. We offer a wide range of specific industry ready courses and training opportunities in the areas of computer science and IT, animation and multimedia, as well as engineering, management and advanced technology. Our programs include workshops, training, internships, corporate training, certificate courses, placement training, research, and development programs, all designed to meet the needs of students, professionals, academic institutions, and industry. Our reputation as one of the best technology training providers, is a testament to our commitment to helping our students and clients acquire the skills and knowledge they need to succeed in their careers and goals.

# **Our Clientele/Collaborations**

Top private & government academic institutions, college's fests and corporates where directly/indirectly our presence have been felt:

Indian Institute of Technology, Kanpur Indian Institute of Technology (Banaras Hindu University), Varanasi Indian Institute of Technology (ISM), Dhanbad Indian Institute of Technology, Jodhpur Indian Institute of Technology, Bhubaneswar Blithchron, Indian Institute of Technology, Gandhinagar Indian Institute of Technology, Guwahati Indian Institute of Technology, Patna Indian Institute of Management (IIM), Lucknow Indian Institute of Management (IIM), Indore National Institute of Technology, Surat National Institute of Technology, Bhopal National Institute of Technology, Warangal National Institute of Technology, Trichy Chandigarh University DIC, Department of Applied Arts (Visual Arts), Banaras Hindu University, Varanasi Madan Mohan Malaviya University of Technology, MMMUT Gorakhpur Maharaja Agrasen Institute of Technology, Delhi Thapar Institute of Engineering & Technology, Punjab Assam Engineering College, Assam Jaypee University of Engineering & Technology Shillong College, Meghalaya SRCC, Delhi University Kendriya Vidyalaya, India DAV School, India

.....

Industry/Corporate/Startups/Government MapsCrew Rabbixel CreativeHatti Accenture





Capgemini F1 Digitals TIH IIT Roorkee, DST, Govt. of India

and many more tech & non-tech colleges/universities/institutes/schools & organizations/startups/companies across India and globe.

# **Achievements & Milestones**

- Our alumni / students are working in top notch company of India & MNCs VMware, Infosys, Cognizant, CGI, Fidelity, Razorpay, EXL, CARS24, Tata Steel, NVIDIA, MyKaarma, Oyo Rooms, Samsung, Walmart Labs, L&T, JIO, Citibank, TCS, Accolite, BNY Mellon, and many more.
- Conducted a number of workshop/training/internship programs in many colleges/universities/schools like IITs, IIMs, NITs,
  IISc & other prestigious institutions of India & with the corporates too.
- Trained many college/university/school students, some of them have created a milestone for EduVitae Services by meeting with Shri Narendra Damodardas Modi (Prime Minister of India) related to some robotics projects.
- Collaborating with Industries / Corporates / Startups to provide them hiring services (helping them to hire fresh trained talent with us).
- Signed MOUs / worked with top notch colleges / universities / schools / organizations like Techkriti IIT Kanpur, Technex IIT (BHU) Varanasi, Wissenaire IIT Bhubaneswar, Techniche IIT Guwahati, Concetto IIT (ISM) Dhanbad, Pravega IISc Bangalore, IGNUS IIT Jodhpur, Ranbhoomi IIM Indore, IIM Lucknow, MMMUT GKP, NIT Surat, NIT Bhopal, NIT Warangal, NIT Trichy, Chandigarh University, Thapar University, SRCC DU, KMC DU, TIH IIT Roorkee DST Govt. of India and many other academic institutions for professional / industry ready & learning skills training / workshop / internship programs.

# Prerequisites

Participants from 1<sup>st</sup> year/ 2<sup>nd</sup> year / 3<sup>nd</sup> year / 4<sup>th</sup> year of CSE/IT/MCA/BCA/MSc/BSc-IT/ECE/EE/Other branch/stream will get more benefit after joining this program and other interested students / learners can also participate in that as per their requirement.

# What is required before joining this training program?

Here's the checklist

- 1. A laptop with Microsoft Windows (7 or later) configuration along with smartphone as per need/requirement.
- 2. Laptop Charger/Adapter for charging purpose.
- 3. USB Mouse for designing purpose (if required).
- 4. Internet Connectivity (Typically to be able to do video call / conferencing, if the program is in online mode)
- 5. Notepad & Pen/Pencil for important notes and most important your interest & dedication.

# **Training Deliverables & Takeaways**

Every participant will get

- ✓ Industry Ready Curriculum
- ✓ Interactive & Doubt Session
- ✓ Certification Program
- Mini & Major Projects





- ✓ Career Guidance
- ✓ Projects/Practical Based Learning

# **Course & Content**

All of the sessions will be theoretical & practical oriented, so it will be really great if participant(s) can look on the syllabus which we are going to cover during training days.

# **Data Science & It's Application**

# Module 1 : Python and required libraries (Sessions 1-10)

# Session 1-3 : Fundamentals of Python

- Introduction to Python: Operators, Datatypes, Syntax, Variables, loops.
- Data structures and functions in Python.

## Session 4-7 : Numpy and Pandas

- NumPy basics: arrays, operations, indexing.
- Pandas introduction: Series, DataFrame, operations.
- Data cleaning, handling missing data, and data wrangling.
- Advanced techniques: merging, reshaping, and grouping.
- Practical implementation of pandas functions over a given dataset. (Project 1)

## Session 8-10 : Data Visualization with Matplotlib and Seaborn

- Matplotlib basics: plotting, customization.
- Seaborn for statistical data visualization.
- Visualizing trends, distributions, and relationships.

# Module 2 : Mathematics behind Data Science and AI (Sessions 11-16)

## Session 10-13 : Statisitcs

- Descriptive and Inferential Statistics for Data Science
- Applications in real-time, and its significance

## Session 14 : Linear Algebra

Importance of Linear Algebra in Machine Learning, vector spaces, matrices and its analogy with a dataset, operations, etc.

## Session 15 : Probability

Fundamentals of probability, its significance in machine learning models, random variables, probability distributions, etc.

## Session 16: Optimization Techniques

Gradient Descent and its types, Need for optimization in machine learning, etc.

## Module 3 : Machine Learning & Deep Learning (Sessions 17-34)

#### Session 17-20 : Introduction to Machine Learning

• Basic concepts of ML: supervised vs. unsupervised learning.





- Linear regression: theory, implementation, evaluation.
- Logistic regression: application, evaluation metrics.

#### Session 21-22 : Machine Learning models

- Overview of Random Forest, KNN, and their use cases.
- Model evaluation and validation techniques.

#### Session 23-25 : Application Project 1 (Project - 2)

Guided project applying regression or classification techniques.

#### Session 26-28 : Introduction to Deep Learning with TensorFlow/Keras

- Difference between Machine Learning and Deep Learning.
- Neural networks basics: architecture, layers, activations.
- Building and training neural networks.
- Convolutional Neural Networks (CNNs) fundamentals.

#### Session 29-32 : Advanced Deep Learning and Applications

- Recurrent Neural Networks (RNNs) basics.
- Fundamentals of Natural Language Processing and introduction to LSTMs
- Application of deep learning in real-world scenarios.

#### Session 33-34: Model Deployment and Optimization

- Deploying models with Flask or Docker.
- Hyperparameter tuning and optimization strategies.
- Monitoring and maintaining deployed models.

#### Module 4 : Real-time capstone Project and its implementation (Sessions 35-39)

Session 35 : Explanation of problem statement, its usecase, its importance and ways to approach for a solution

Session 36-39: Hands-on coding project with doubt & feedback sessions on each solution provided (Project - 3)

#### Module 5 : Career Guidance and personality development (Session 40)

Session 40 : Resume building, interview preparation, and job search strategies.

#### Disclaimer

All of the matters/disputes related to internship/training/workshop needs to be addressed to EduVitae Services team only. See our terms and conditions on www.eduvitae.in and fees once paid is non-refundable and non-transferrable. Company reserves full right to withdraw any offer/discount anytime without any prior notification, also it's important to understand that center & batches date of internship/training can be changed as per requirements & situations.



Please make sure that this training/internship will be organized by EduVitae Services, it is to note that if any IIT/NIT/IIM/IISC/Private/Government organization is EVS partner then they are responsible for providing certification to attending students/professionals, marketing, publicity and rest operations, scheduling, payment processing, training, content development etc. will be taken care by EduVitae Services.