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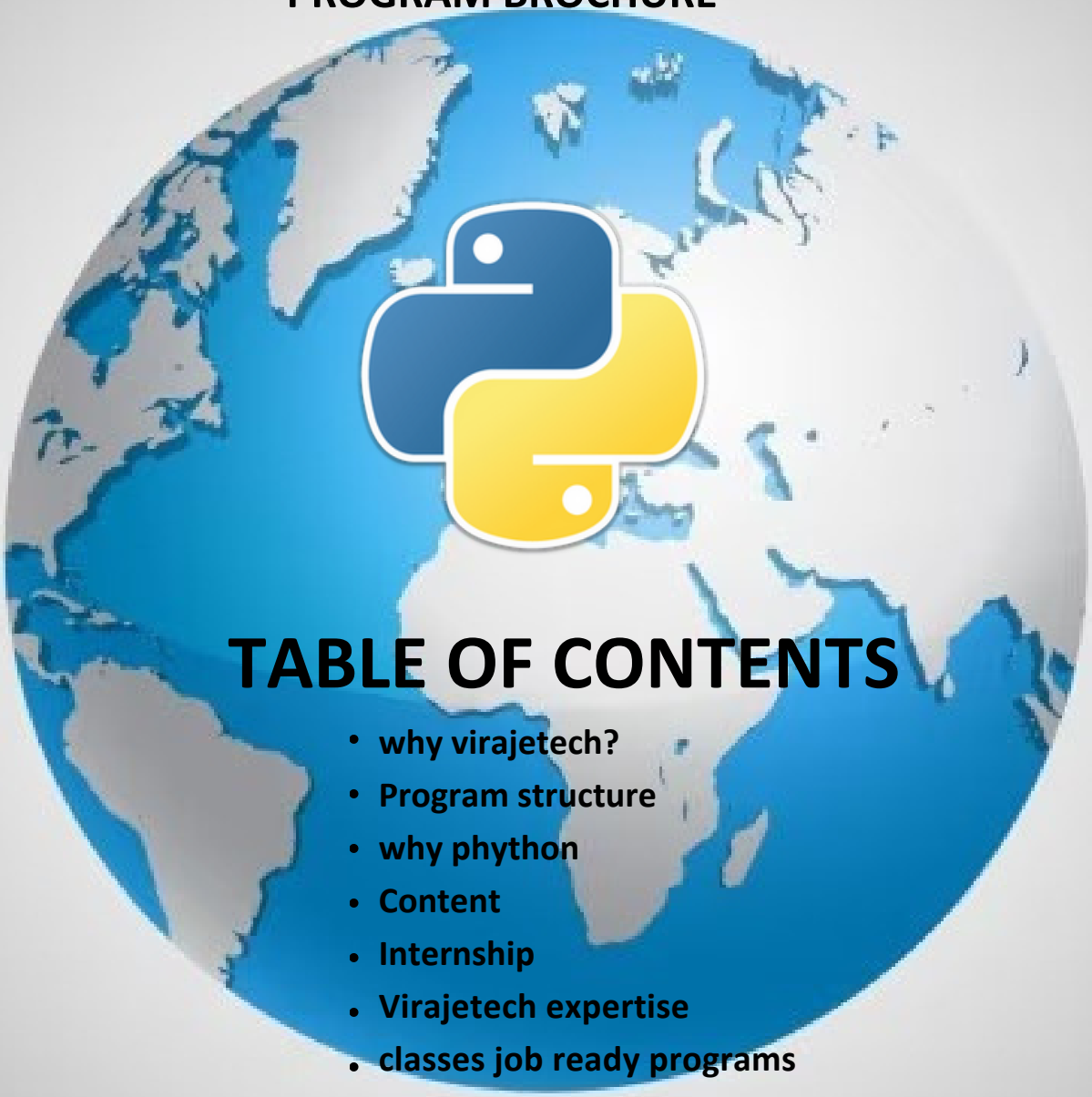
VIRAJE TECH

CERTIFIED GCP

PROGRAM BROCHURE



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WHY VIRAJETECH?

“OUR VISION”

To be the safest, most progressive Technology Provider, relentless in the pursuit of Client and employee excellence

Virajetech's Placement Team has garnered a reputation for the industry's most exceptional placement records. Their dedicated efforts have facilitated the successful transition of thousands of aspirants into flourishing careers .

EXPERT TRAINERS

10+year experianced and Industry Experts

Elite Faculty from Prestigious universities with deep research and coaching expertise

JOB ASSISTANCE

End to End job Support

Personalized resume and interview preparation support Job updates and connects

COMPREHENSIVE

30 hours & 700+ Learning Hrs.

Syllabus aligned with virajetech standards and rigorously updated to match with latest industry requirements

REALTIME EXPERIENCE

Projects and Internships

20 capstone projects and 1 client projects with active interaction Internship -developing POCs

PROGRAM STRUCTURE

- **THE COURSE FOR BEGINNER's PROFESSIONALS AND INTERMEDIATE LEARNERS IN THE FIELD OF**
- **AWS THIS IS A CAREER- ORIENTED PROGRAM, DESIGNED TO IMPART A STRONG FOUNDATION**

- **PRE COURSE SELF-STUDY**
- **HIGH QUALITY VIDEOS**
- **EASY LEARNING APPROACH.**
- **CERTIFICATIONS**
- **JOB READY PROGRAM**

- **LIVE TRAINING**
- **30 HOUR A WEEK**
- COMPREHENSIVE SYLLABUS
- **HANDS-ON PROJECTS**
- **EXPERT TRAINERS AND MENTORS**

Python Programming in Artificial Intelligence

WHY PYTHON?

In the IT industry, a Python course is essential for professionals as Python's simplicity and versatility make it a go-to language for web development, data science, and AI. Mastering Python accelerates project timelines, enhances productivity, and opens doors to diverse career opportunities in the rapidly evolving tech landscape. Employers highly value Python proficiency, recognizing its pivotal role in driving innovation and efficiency.Python's extensive community support ensures access to a wealth of resources and collaborative problem-solving. The language's popularity is evident in its use across various domains, making it a valuable skill for staying competitive in the ever-changing IT industry.

1 Introduction to Artificial Intelligence (AI)

- *Definition of Artificial Intelligence (AI).*
- *Overview of AI's historical development.*
- *Understanding the types of AI: Narrow vs. General.*
- *Key components of AI: Perception, Reasoning, Learning.*
- *Applications of AI across various industries.*
- *Emergence of cognitive computing in the AI landscape.*
- *AI's role in automation and robotics.*
- *Exploring the philosophy and ethics of AI.*
- *The cognitive revolution and its impact on AI.*
- *Current challenges and limitations in the field of AI.*

2 Python Basics for AI Programming

- *Introduction to Python programming language.*
- *Understanding Python data types and variables.*
- *Control structures: Conditionals and loops in Python.*
- *Functions and modules in Python programming.*
- *Key Python libraries for AI development.*
- *Advanced Python concepts: Generators and decorators.*
- *Error handling and exception handling in Python.*
- *Pythonic coding style and best practices.*
- *Debugging and profiling Python code.*
- *Creating virtual environments for AI projects in Pytho*

3 Control Flow

- *If/Else Statements*
- *For/while Statements*
- *Range()Overview of machine learning (ML).*
- *Types of machine learning: Supervised, Unsupervised, Reinforcement Learning.*
- *Key Python libraries for machine learning (NumPy, Pandas, Scikit-learn).*
- *Data preprocessing and feature engineering in machine learning.*
- *Model training and evaluation processes.*
- *Supervised learning algorithms: Regression and Classification.*
- *Unsupervised learning algorithms: Clustering and Dimensionality Reduction.*
- *Ensemble learning techniques and Random Forests.*
- *Hyperparameter tuning for optimizing machine learning models.*
- *Building end-to-end machine learning pipelines with Python.*
- *function*
- *Break and continue statements Else clauses on Loops*
- *Pass statements*

4 Deep Learning Basics with Python

- *Introduction to deep learning.*
- *Neural networks architecture and components.*
- *Activation functions and loss functions in deep learning.*
- *Backpropagation and gradient descent algorithms.*
- *Python frameworks for deep learning: TensorFlow and Keras.*
- *Convolutional Neural Networks (CNNs) in Python.*
- *Recurrent Neural Networks (RNNs) and Long Short-Term Memory (LSTM).*
- *Transfer learning concepts in deep learning.*
- *Autoencoders and Generative Adversarial Networks (GANs).*
- *Ensuring interpretability and explainability in deep learning models.*

5 Natural Language Processing (NLP) with Python

- *Overview of Natural Language Processing (NLP).*
- *Text preprocessing techniques and tokenization.*
- *Named Entity Recognition (NER) applications with Python.*
- *Sentiment analysis using Python in NLP.*
- *Python libraries for NLP: NLTK and SpaCy.*
- *Text summarization techniques with Python.*
- *Machine translation using Python in NLP.*
- *BERT and Transformer models in natural language processing.*
- *Real-world applications of NLP with Python.*
- *Future trends and advancements in NLP.*

6 Computer Vision with Python

- *Introduction to computer vision.*
- *Image processing techniques with Python.*
- *Object tracking and motion detection using Python.*
- *Image segmentation and its applications.*
- *Face recognition techniques with Python.*
- *Python libraries for computer vision: OpenCV.*
- *Generative models for image synthesis.*
- *Image captioning applications with Python. Real-*
- *world applications of computer vision. Emerging*
- *trends in computer vision with Python.*

7 Reinforcement Learning with Python

- *Basics of reinforcement learning.*
- *Deep reinforcement learning frameworks: TensorFlow, PyTorch.*
- *Markov Decision Processes (MDP) in reinforcement learning.*
- *Q-learning algorithms and Deep Q Networks (DQN).*
- *Actor-Critic methods for continuous control.*
- *Multi-agent reinforcement learning concepts.*
- *Python libraries for reinforcement learning: OpenAI Gym.*
- *Real-world applications of reinforcement learning.*
- *Challenges and opportunities in reinforcement learning.*
- *Future trends and advancements in reinforcement learning.*

8 AI Ethics and Responsible AI

- *Importance of ethics in AI development.*
- *Bias detection and mitigation in AI models.*
- *Fairness and accountability in AI algorithms.*
- *Interpretable machine learning models.*
- *Ethical considerations in AI decision making.*
- *Addressing privacy concerns in AI applications.*
- *Societal impact of AI and responsible AI practices.*
- *Global ethical guidelines for AI development.*
- *Legal and regulatory aspects of AI ethics.*
- *Continuous improvement and evolving standards in responsible AI.*

9 Hadoop Performance Tuning with Python

- *Identifying Performance Bottlenecks with Python*
- *Python Scripts for Configuring Hadoop Parameters*
- *Optimizing MapReduce Jobs with Python*
- *Python Tools for Hadoop Cluster Sizing*
- *Best Practices for Python and Hadoop Performance Tuning*
- *Python Libraries for Hadoop Performance Analysis*
- *Real-world Examples of Python and Hadoop Performance Tuning*
- *Benchmarking Hadoop Clusters with Python*
- *Continuous Improvement in Hadoop Performance*

10 AI Deployment and Model Serving

- *Overview of model deployment in AI.*
- *Flask and Docker for AI model deployment.*
- *RESTful APIs for serving AI models.*
- *Cloud-based deployment platforms: AWS, Azure, Google Cloud.*
- *Monitoring and scaling AI deployments.*
- *Continuous Integration and Continuous Deployment (CI/CD) for AI.*
- *MLOps: DevOps for machine learning.*
- *Model monitoring and drift detection.*
- *Edge AI deployment and inference.*
- *Ensuring model explainability in deployment*

11 AI and IoT Integration with Python

- *Connecting AI with Internet of Things (IoT). Real-*
- *time processing of IoT data using AI.*
- *Python for edge computing in AI and IoT.*
- *Federated learning and decentralized AI in IoT.*
- *AI-driven anomaly detection in IoT applications.*
- *Security considerations in AI and IoT integration.*
- *Edge AI in IoT devices and applications.*
- *Addressing challenges in AI and IoT convergence.*
- *Emerging trends in AI and IoT integration.*
- *Future directions and opportunities in AI and IoT.*

12 AI in Healthcare with Python

- *Predictive analytics for disease diagnosis.*
- *AI-assisted drug discovery in healthcare.*
- *Medical image analysis using Python.*
- *Natural language processing for healthcare data.*
- *Challenges and opportunities in AI for healthcare.*
- *Ethical considerations in AI applications in healthcare.*
- *Integrating AI with electronic health records (EHR).*
- *AI-driven personalized medicine.*
- *Remote patient monitoring with AI.*
- *Future innovations and trends in AI healthcare.*

INTERNSHIP

Explore valuable internship opportunities with us! Join a dynamic and innovative environment, collaborate on real-world projects, and enhance your skills. We're seeking motivated individuals with a passion for learning and strong communication skills. This internship offers hands-on experience, exposure to industry best practices, and potential career pathways.

VIRAJETECH EXPERTISE CLASS

PLACEMENT ASSISTANCE TEAM

PROJECT MENTORING
35 hours Live Mentoring in industry projects

DOUBTS SESSIONS
Twice a week, Live doubts session from mentors and experts

JOB COUNSELLING
Mapping your profile to suitable job role

INTERVIEW QUESTIONS
Frequently asked interview questions course included

ALUMINI CONNECT
Connect with successful Alumni to learn from experience

RESUME SUPPORT
Personalized resume creation support from professionals

PLACEMENT ASSISTANCE

Microsoft
IQVIA
genpact
Capgemini
cognizant
SymphonyAI
wipro
amazon
EXAMROOM.AI
Affine
Data • Insights • Transformation
SagasIT Analytics
accenture
SUTHERLAND
TATA
TATA CONSULTANCY SERVICES
Mercedes-Benz
HCL

OUR LEARNERS' FEED BACK

HIGHEST LEVEL OF CUSTOMER DELIGHT

ruchi s
1 review · 3 photos
★★★★★ 3 months ago

VirajeTech has been a game-changer for me. Their training courses have provided me with the skills I needed to excel in my career 4X. The instructors and Arjun sir are passionate about what they do, and it shows in their teaching. Hands on and practical way of teaching, I highly recommend VirajeTech to anyone looking to further their knowledge and skills

Anoop G
6 reviews
★★★★★ 3 months ago

Getting placed at Amency was a dream come true, and I owe a big thank you to VirajeTech for making it possible. The instructors were experts in their field, and they created a supportive learning environment. The hands-on approach and practical exercises made all the difference.

Sachidanand Shahane
3 reviews
★★★★★ 7 months ago

I am part of the AWS Associate master Class. The course was designed in a fashion that we are able to cover most of the content in a very short time. our trainer Kumar sir clarified any doubt we had and also pushed us to do the practicals which is really helpful in the learning process. Hi having vast knowledge and experience in Devops and Multi cloud platform(AWS,Azure,GCP),he provide the opportunity to get as much knowledge and guidance as possible. each session are interactive has real time use cases.

Sayali Gawde
2 reviews
★★★★☆ a year ago

Thanks for the AWS tutoring by Virajtech. The best decision I have taken in my career so far. Instructor was very helpful and gave all possible solutions related to the problem which we faced in real time scenarios. This is what I have experienced in this course, a very practical and beneficial one.

Piyush Poply
2 reviews
★★★★★ 3 years ago

I am connected with this organization since its inception. This is one of the best places to learn, practice and grow your skills up to the standards of the industry. As in IT industry, maintaining your skills and updating yourself is the most important thing, we should never stop learning and this is exactly what this institute provides. The online classes are really great as well as the trainers.

Harpreet Singh
12 reviews
★★★★★ 7 months ago

Give very detailed explanation and also live teaching classes. Covering all latest topics which for sure help in getting jobs in today's market

ADMISSIONS AND CONTACTS

ENQUIRE FOR DETAILED INFORMATION FOR ENROLLMENT

DURATION:35 HOURS

LEARNING : ONLINE MODE

b 1st floor, 64, 3rd Cross Rd, Electronics City Phase 1, Electronic City, Bengaluru, Karnataka 560100

PHN NO:8618501719

8 HRS/WEEK

SELF STUDY

+

8 HRS/WEEK

INSTRUCTOR LED LIVE ONLINE LEARNING

+

4 HRS/WEEK

PROJECTS & ASSESSMENTS

20 HOURS A WEEK COMMIMENT

AWS *IS RATED AS* **THE TOP CAREER**

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