PYTHON CERTIFICATION COURSE

Master Python skills and take your career to the next level!

1.2 Million Learners

1:1 Personlized Mentorship

55% Average Salary Hike

Python Certification Course

Learn the most in-demand Python certification course that will help you gain skills in writing Python and working with packages, such as SciPy, Matplotlib, Pandas, Scikit-Learn, NumPy, web scraping libraries, and the Lambda function. Through this training, you will also gain hands-on experience by working on real-world projects.

Hottest **Job of 21st Century**

1.5 Million Job Postings
There is a global estimate of 1.5 million job postings for Python roles by 2022

Skill Development
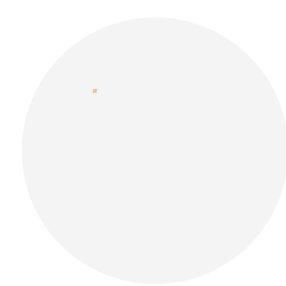Python professionals are equipped with various relevant skills fetching lucrative job offers

Growing Python Industry
42.2% CAGR in the global Python industry

Future-oriented Career
Python is a budding field; a head start will prove to be beneficial

Popular Degree
34% of Python professionals have a master's degree

High Demand
By 2022, India and US will face a demand-supply gap of 220,000 Python professionals

Our **Credentials**

1.2 Million+
Aspiring Active Students

1,000+
Industry-expert Instructors

400+
Hiring Partners

200+
Corporates Upskilled

55%
Average Salary Hike

155+
Countries' Learners

About **Program**

In this Python Certification Course, you will be exposed to both the basic and advanced coding skills of Python and more. You will also get to work with packages such as SciPy, Matplotlib, Scikit-learn, Pandas, NumPy, etc.

Key **Highlights**

- ✔ 42 Hrs Instructor-led Training
- ✔ 50 Hrs Projects and Exercises
- ✔ Job Assistance
- ✔ Lifetime Free Upgradation

- ✔ 24 Hrs Self-paced Videos
- ✔ Certification
- ✔ Flexible Schedule
- ✔ Mentor Support

Program **Pedagogy**

Instructor-led Training
Get trained by top industry experts

1:1 Personalized Learning
Hands-on exercises, project work, quizzes, and capstone projects

Self-paced videos
Learn at your own pace with world-class content

Projects and Exercises
Get real-world experience through projects

Hackathons
Get a sense of how real projects are built

Peer Networking and Group Learning
Improve your professional network and learn from peers

Gamified Learning
Get involved in group activities to solve real-world problems

Program **Curriculum**

Module 1

Python Environment Setup and Essentials

- Introduction to Python Language
- Features, the advantages of Python over other programming languages
- Python installation – Windows, Mac & Linux distribution for Anaconda Python
- Deploying Python IDE
- Basic Python commands, data types, variables, keywords and more

Module 2

Python language Basic Constructs

- Built-in data types in Python
- Learn classes, modules, Str(String), Ellipsis Object, Null Object, Ellipsis, Debug
- Basic operators, comparison, arithmetic, slicing and slice operator, logical, bitwise
- Loop and control statements while, for, if, break, else, continue.

Module 3

OOP concepts in Python

- How to write OOP concepts program in Python
- Connecting to a database
- Classes and objects in Python
- OOPs paradigm, important concepts in OOP like polymorphism, inheritance, encapsulation
- Python functions, return types and parameters
- Lambda expressions

Module 4

Database connection

- Understanding the Database, need of database
- Installing MySQL on windows
- Understanding Database connection using Python.

Module 5

NumPy for mathematical computing

- Introduction to arrays and matrices
- Broadcasting of array math, indexing of array
- Standard deviation, conditional probability, correlation and covariance.

Module 6

SciPy for scientific computing

- Introduction to SciPy
- Functions building on top of NumPy, cluster, linalg, signal, optimize, integrate, subpackages, SciPy with Bayes Theorem.

Module 7

Matplotlib for data visualization

- How to plot graph and chart with Python
- Various aspects of line, scatter, bar, histogram, 3D, the API of MatPlotLib, subplots.

Module 8

Pandas for data analysis and machine learning

- Introduction to Python dataframes
- Importing data from JSON, CSV, Excel, SQL database, NumPy array to dataframe
- Various data operations like selecting, filtering, sorting, viewing, joining, combining

Module 9

Exception Handling

- Introduction to Exception Handling
- Scenarios in Exception Handling with its execution
- Arithmetic exception
- RAISE of Exception
- What is Random List, running a Random list on Jupyter Notebook
- Value Error in Exception Handling.

Module 10

Multi Threading & Race Condition

- Introduction to Thread, need of threads
- What are thread functions
- Performing various operations on thread like joining a thread, starting a thread, enumeration in a thread
- Creating a Multithread, finishing the multithreads.
- Understanding Race Condition, lock and Synchronization.

Module 11

Packages and Functions

- Intro to modules in Python, need of modules
- 11.2 How to import modules in python

- Locating a module, namespace and scoping
- Arithmetic operations on Modules using a function
- Intro to Search path, Global and local functions, filter functions
- Python Packages, import in packages, various ways of accessing the packages
- Decorators, Pointer assignments, and Xldr.

Module 12

Web scraping with Python

- Introduction to web scraping in Python
- Installing of beautifulsoup
- Installing Python parser lxml
- Various web scraping libraries, beautifulsoup, Scrapy Python packages
- Creating soup object with input HTML
- Searching of tree, full or partial parsing, output print

Skills to Master

- Python Basic Constructs
- Multi-threading
- Packages & Functions
- Exception Handling
- Python for Apache Spark
- Database Connections
- Matplotlib
- Pandas NumPy & SciPy
- OOPS in Python
- Web Scraping

Course **Projects**

Projects cover the following industries:

| Retail | Social Media | Supply Chain | Entrepreneurship | E-commerce | Banking | Healthcare | Insurance |

Analyzing the Naming Pattern Using Python

This real-life-based project has been included in the training to allow the learners to work with the United States Social Security Administration (SSA) that has made data available on the frequency of baby names from 1880 to 2016.

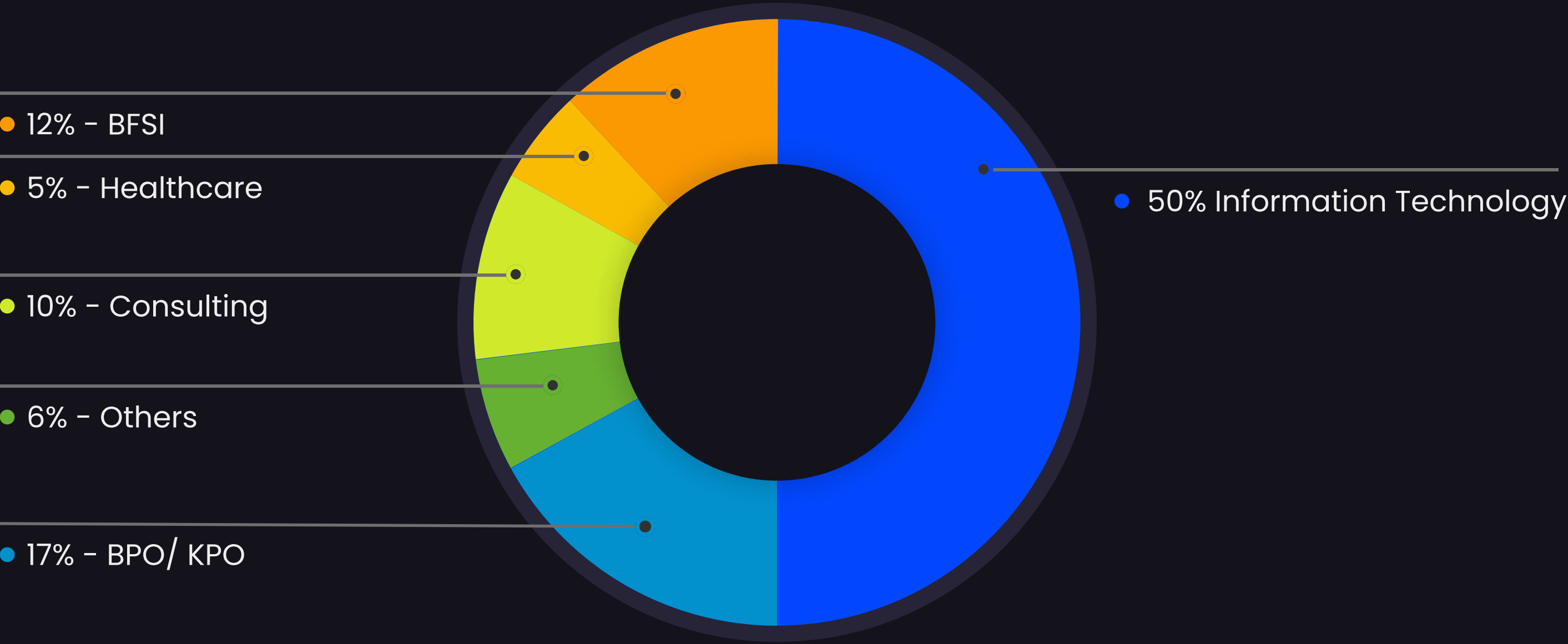## Performing Analysis on Customer Churn Dataset

As an important part of the project, the learners will be required to analyze employment reliability in the telecom industry and work on real-time analysis of data with multiple labels and data visualization for reliability factor.

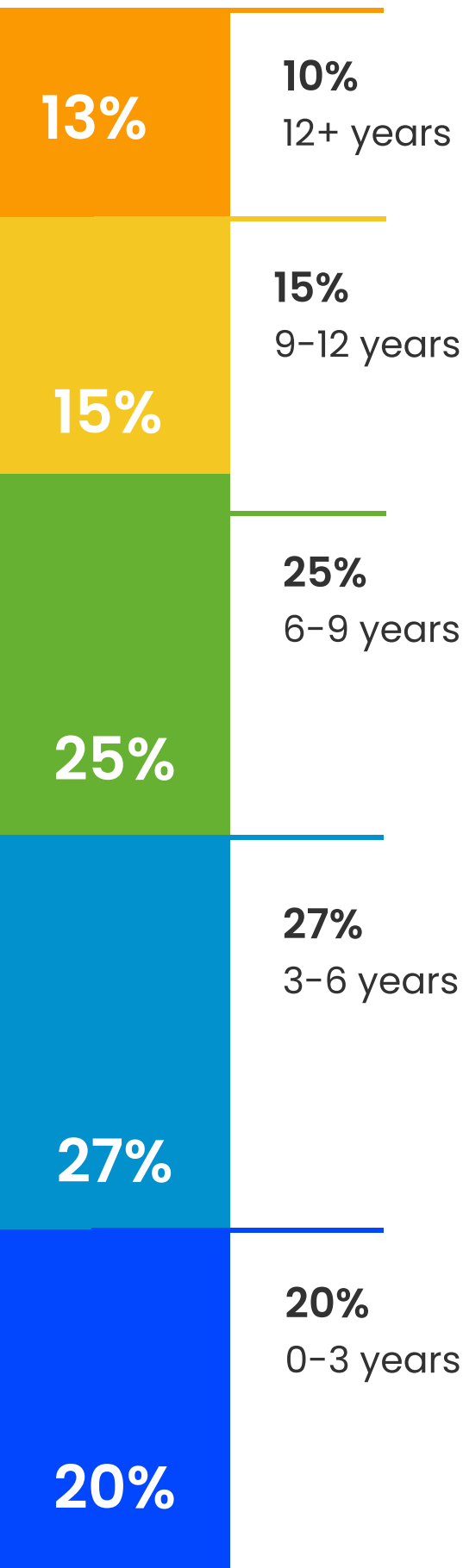## Python Web Scraping for Data Science

The project gives a practical exposure to the applications of this programming language in web scraping. Also get a chance to work on various Web Scraping libraries, Beautiful Soup, Navigable String, parser, searching tree deployment, and more.

Meet the **Batch**

Industries Our Learners Come From

- 12% - BFSI
- 5% - Healthcare
- 10% - Consulting
- 6% - Others
- 17% - BPO/ KPO
- 50% Information Technology

Work **Experience**

- 13% — 10% 12+ years
- 15% — 15% 9-12 years
- 25% — 25% 6-9 years
- 27% — 27% 3-6 years
- 20% — 20% 0-3 years

Some of their current employers include

amazon

Glimpse of our
Successful Transitions

4.6	4.5	4.38 ★★★★⯪

Career **Transitions**

Rajesh Venaganti Senior Software Engineer	From **Associate Consultant**	To **Senior Software Engineer**
Pratik Kumar Product Manager	From **Marketing Manager**	To **Product Manager**
Yogesh Kumar Senior Software Engineer	From **Associate Consultant**	To **Senior Software Engineer**
Gaurav Saboo Senior Technical Associate	From **Technical Analyst**	To **Senior Technical Associate**
Ankit Kumar Data Scientist	From **B.com Graduate**	To **Data Scientist**
Melwin Rodrigues Data Scientist	From **Customer Service Agent**	To **Data Scientist**
Shehzin Mulla Research Analyst	From **Data Analyst**	To **Research Analyst**
D Rajesh Sahoo Machine Learning Engineer	From **B. Tech — Civil Engineering**	To **Machine Learning Engineer**

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