
The Valley Bootcamp

Data Science With Python

Overview

The Valley Bootcamp is a coding boot camp based out of Bangalore. We excel in providing high quality, hands on training by industry experts. Our students undergo rigorous training in software development and advanced topics. We try to bridge the growing gap between graduation and employment.

Goals

- Get used to Python development setup Python, Pip, Virtualenv, PyCharm
- Learn about data structures, functions, package
- Learn about Probability and statistics, the backbone of Machine learning
- Get in-depth insights on Data Visualizations
- Learn about feature engineering, one of the central themes of ML
- Master different libraries used to apply ML techniques in the industry
- Learn various ML techniques and apply them on real world data sets

Contact

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Syllabus

Week	Topic
Week 1	Installation of python and basics of python Data types and operators Indentation, if, for and while statements
Week 2	functions Classes(optional) Programs to solve
Week 3	Introduction to statistics and it's applications Descriptive statistics Central tendency measure – mean, median, mode Measures of dispersion – Variance, Standard deviation
Week 4	Interquartile range and box plots Types of data Probability Data distribution Inferential statistics
Week 5	Central limit theorem Confidence interval Hypothesis testing and A/B testing Examples
Week 6	Learning Libraries Pandas, numpy, matplotlib, seaborn, scikit-learn
Week 7	Data pre-processing and data visualization Exploratory Data Analysis
Week 8	Feature engineering
Week 9	Introduction to Machine Learning Supervised algorithms <ul style="list-style-type: none">• Linear regression• Logistic regression• Naïve bayes

Week	Topic
Week 10	Supervised algorithms <ul style="list-style-type: none">• Decision tree and Random forest• SVM• Neural network
Week 11	Model evaluation Unsupervised algorithms <ul style="list-style-type: none">• K means clustering• PCA
Week 12	Introduction to NLP Kaggle projects and how to approach them.