Python + ML
The Valley Bootcamp

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Overview

The Valley Bootcamp is a coding boot camp based out of Bangalore. We thrive in providing high quality, hands on training by industry experts. Our students undergo rigorous training in software fundamentals and advanced topics. We try to bridge the growing gap between employability and employment. Our students undergo, 12 weeks of intensive coding in software engineering.

Our students will start contributing rigorously to the tech community in the form of blogs, contribution to open source. By the completion of the program, students would have amassed enough technical skills to perform to their best in the technical world.

Goals

- Provide high quality technical training in computer programming
- Conquer the objectives of OOPS concepts
- Build REST APIs
- Understand MVC and become proficient in databases and cloud computing
- Databases and cloud computing
- Execute application development

Python Syllabus

Course Overview

This course will start with an introduction to python programming. The course covers all the topics needed to be a good backend developer. On the scripting part, we cover Linux and shell scripting. We also go through the basics of github. We start with setting up the environment using python, pip and pycharm. We go through how a rest api works and also implement few of them. Our database lessons will include, mongoDb and SQL and we also teach some basics in cloud computing like EC2, dynamoDb, RDS, S3 etc.

This course will introduce the learner to applied machine learning, focusing more on the techniques and methods than on the statistics behind these methods. The course will start with a discussion of how machine learning is different than descriptive statistics. The issue of dimensionality of data will be discussed, and the task of clustering data, as well as evaluating those clusters, will be tackled. Supervised approaches for creating predictive models will be described. The course will end with a look at more advanced techniques, such as building ensembles, and practical limitations of predictive models. By the end of this course, students will be able to identify the difference between a supervised (classification) and unsupervised (clustering) technique, identify which technique they need to apply for a particular dataset and need, engineer features to meet that need, and write python code to carry out an analysis.

Instructor

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The Valley Bootcamp

Course Schedule

Week	Subject
Week 1	Introduction to Python + ML
Week 2	Linux And Shell Scripting
Week 3	Python, PIP , Pycharm
Week 4	Understanding REST API
Week 5	Build your own rest API
Week 6	Databases: MongoDb, SQL
Week 7	Cloud Computing: EC2, S3 etc
Week 8	Interview preparation. DS and Algos
Week 9	Introduction to Machine Learning, Probability, Conditional Probability, Bayes Theorem
Week 10	Statistics, Linear Regression, Logistics Regression
Week 11	Supervised/Unsupervised learning, Distance measures, Artificial neural networks
Week 12	Clustering and Classification