



Center for Software Research & Development

Data Scientist (Module 1)

This Module will cover **Python & its libraries** for Data Sciences and **three (3) Capstone Projects** using tools learned during this training.

Objectives:

We'll focus primarily on Python programming for Data Science and develop deep understanding of most popular Python's libraries for Data Science i.e. NumPy and Pandas. **All our training will be on real datasets.**

Prerequisite:

No previous math, stats, or programming experience required — so you can start learning right away.

Learning Contents:

1. Analysis with Python

- a) Python Algorithms
- b) Containers and its Data Types
- c) Data Structures & Loops
- d) Conditional Statements
- e) Frequency Tables
- f) Commands and Functions

Capstone Project: Profitable App

2. Data Cleaning and Time Series Analysis

- a) Data Wrangling and Analysis
- b) Working with Time Series

Capstone Project: Exploring Hacker News

3. Data Analysis with NumPy and Pandas

- a) NumPy's Explorations
- b) Pandas' Aggregations
- c) Exploring Data with Pandas
- d) Data Munging with Pandas

Capstone Project: Exploring eBay