Six Days Workshop
On
"Basic and Applied Python with Machine Learning Application to Stock Market Data"

WHO SHOULD ATTEND?

People interested in learning:

- basics of python programming and/or
- machine learning and/or
- stock market analysis
- algorithmic trading

Faculty & Students (Art/ Commerce/ Science/ Any professional course) and Professionals

Expectations/ Background of participants:

- No prior coding background expected
- Understanding of high school mathematics
- Age above 18 years on 1st December 2019

TAKE AWAY FROM THE WORKSHOP:

- Able to do programming using Python.
- Able to do Machine Learning programming.
- Able to understand trading in stock markets.
- Stock market data/ data analysis using Python.
- Able to do Algorithmic trading in stock market

PATRONS

Hon. Shri Vishram Jamdar
Chairman, VNIT, Nagpur.

Hon. Shri Pramod M. Padole
Director, VNIT Nagpur

WORKSHOP COORDINATOR

Dr. Manish P. Kurhekar

Associate Professor CSE Dept.,

**Visvesvaraya National Institute of Technology
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IMPORTANT DATES
**Beginning of Registration:27th Sept 2019
Last Date of Registration: 09th Dec 2019
Notification of Acceptance by
E-mail: 10th Dec 2019**

Six Days Workshop
On
"Basic and Applied Python with Machine Learning Application to Stock Market Data"

16th Dec to 21st Dec 2019

Organized by

Department of Computer Science and Engineering,

Visvesvaraya National Institute of Technology, Nagpur-440010, Maharashtra, India.

http://www.vnit.ac.in

ABOUT THE DEPARTMENT

The Department of Computer Science & Engineering came into being in 1987. It offers under-graduate and post-graduate programs. Currently, there are 30 Full Time PhD students enrolled in the department in the areas of parallel computing, real time & distributed systems, cloud computing, networks and Bio informatics. The department has well qualified and motivated faculty members and support staff. The laboratories are adequately equipped with state-of-the-art facilities. The department is actively involved in R&D as well as consultancy projects and has collaborations with several industries, academic institutes and R&D organizations in the country. The students of the department are consistently delivering very good performance in various areas like post-graduation, research, placement in dream companies, acquiring prizes in various contests etc.

ABOUT THE INSTITUTE

Visvesvaraya National Institute of Technology, Nagpur is one of the thirty-one National Institutes of Technology in the country. The Govt. of India conferred on the Institute, the Deemed to be University status (under University Grants Commission Act, 1956 (3 of 1956)) with effect from 26th June 2002. Subsequently, the Central Govt. by Act of Parliament (National Institutes of Technology Act, 2007 (29 of 2007)) declared VNIT Nagpur as an Institute of National Importance along with all other NITs. The Act was brought into force from 15th August 2007. Earlier, the Institute was known as Visvesvaraya Regional College of Engineering (VRCE). It was established in the year 1960 under the scheme sponsored by Govt. of India and Govt. of Maharashtra. The college was started in June 1960 by amalgamating the State Govt. Engineering College functioning at Nagpur since July 1956. In the meeting held in October 1962, the Governing Board of the College resolved to name it after the eminent engineer, planner, and statesman of the country Sir M. Visvesvaraya. The Institute is well connected within 5-8 km to Airport/ Railways and Central Bus station.

ABOUT WORKSHOP

The percentage of people who invest in the stock markets is around 1% in India. This figure is far below compared to developed countries like the USA. The number of people using algorithmic trading is even very less. Strong domestic investment in the stock markets is important for nation building. One of the main reasons for this scenario is the lack of knowledge and skills required for trading in the stock markets.

The main feature of the workshop is to demystify machine learning for the participants. We strongly believe in the old saying by Confucius: "I hear and I forget. I see and I remember. I do and I understand." In that light we will first learn the Python programming language. We will also learn the basic math behind some of the machine learning techniques and apply our learnings to the stock market data.

The first objective of the workshop is to provide knowledge and skill required for investing or trading in the stock market. The human emotion i.e. fear and greed is one of the main reasons for losses in the stock market investing. Because of the digitization of stock exchanges, it is now possible to allow automated algorithms to perform trading actions that automate your trades and in turn, reduces the influence of human emotional factor.

The next objective of the workshop is to train the participant on machine learning and algorithmic trading using the python programming language.

Another salient feature of this workshop is the programming competition. This competition will feature 4 coveted prizes to be won along with citations (One first prize, One runner-up, and Two Consolation). The level of the workshop would be basic to intermediate.

COURSE CONTENTS

- Basics of computation.
- Python language.
- Machine learning using Python.
- Stock market data analysis using Python.
- Technical Analysis of stock market data.
- Back-testing of trading Strategy.
- Algorithmic Trading [Demo]
- Programming Competition

HOW TO APPLY

- Fill Application form & Pay the fee online at SBI collect, https://www.onlinesbi.com/sbicollect/
- The number of participants for the program is limited on first come first serve basis.
- You will receive confirmation of participation by email.
- Once your participation is confirmed registration fee will not be refunded.
- Outstation participants can avail VNIT hostel facility on payment basis.
- Snacks, Hi Tea and Lunch will be provided to the participants.
- Certificate will be provided to the participants at the end of workshop.
- The affiliation/employment details would be given on the certificate. Please fill the application form accordingly.
- The registration fee is mentioned below: (GST at 18% extra)

Professionals: Rs. 4000+ GST= (Rs.4720)
Students/ Unemployed : Rs.3000 + GST= (Rs.3540)

CONTACTS DETAILS

1. Mr. Jagdish Chakole, Mobile: +91-960-426-9053, Email: jagdishchakole@gmail.com

2. Mr. Akshay Saraf, Mobile: +91-930-956-3605, Email: akshaydsaraf@gmail.com

STEPS TO APPLY

1) Open the link https://www.onlinesbi.com/sbicollect/.

2) Click on **Proceed** button

3) Select State of Corporate / Institution as **Maharashtra**

4) Select Type of Corporate / Institution as **Educational Institution**

5) Click on **Go** button

6) Select Educational Institutions Name as **Visvesvaraya National Institute of Technology**

7) Click on **Submit** button

8) Select Payment Category as **Python with machine learning workshop**

9) Fist fill the application form

10) Pay the fees

Note: - After registration send   E-RECEIPT generated after payment on jagdishchakole@gmail.com / akshaydsaraf@gmail.com