



**Sri Sathya Sai Seva Organisations (India), Tamil Nadu**

## **CERTIFICATE OF COMPLETION**

**THIS IS TO CERTIFY THAT**

**JAGADEESAN**

**SSSSO\_PY23\_13**

**has successfully completed the online course**

**"Python - Beginner Level"**

**(18 Hours of Training & Practical Exercises)**

**Awarded on 6th August 2023**

**SRI SURESH KR**

**State President, SSSSO, Tamil Nadu**

## TOPICS COVERED

### **Beginner Level (18 Hours)**

Understanding Computational Thinking & Programming with Turtle, Basic Building Blocks - Data types, Variables, Operators, Expressions, Read, Process & Display, Decision Control in Python, Iteration in Python, User defined functions, Working with Data Structures: List, Tuples, Sets, Dictionary.

### **Intermediate Level (Data Science) (36 Hours)**

Working with NumPy, Pandas - Reading, cleaning & exploring, slicing, filter, group, sort, calculation, write to excel, more pandas commands, Data Visualization - matplotlib, Data Science Project