



INTERNATIONAL INSTITUTE FOR POPULATION SCIENCES, MUMBAI

WORLD POPULATION DAY- 2022 SYMPOSIUM &

LAUNCH OF UNITED NATIONS WORLD POPULATION PROSPECTS- 2022

11

JULY
2022



11:30AM-
01:00PM

Third Floor Hall, Library Building, IIPS

Speakers:



**DR. RAJESHWARI
CHANDRASEKAR**
UNICEF,
MAHARASHTRA



PROF. VEGARD SKIRBEKK
COLUMBIA AGING
CENTER, COLUMBIA
UNIVERSITY



PROF. U. S. MISHRA
DEPARTMENT OF BIO-
STATISTICS AND
EPIDEMIOLOGY, IIPS

Prof. T. V. Sekher & Dr. Dipti Govil
Coordinators

Prof. K. S. James
Director & Sr. Professor, IIPS



International Institute for Population Sciences

Department of Survey Research and Data Analytics

Organizing a workshop on *Introduction to Python Programming* 1st to 5th March 2023



About IIPS

The International Institute for Population Sciences, which celebrated its Golden Jubilee in the year 2006, was established in Mumbai in July 1956 with the collaboration of the United Nations Population Fund (UNFPA), the Government of India, and the Sir Dorabji Tata Trust to serve as the regional Institute for training and research in population studies for the countries in Asia and the Pacific region. The Institute is a “Deemed University” functioning under the administrative control of the Ministry of Health and Family Welfare, Government of India. This is the only Institute of its kind in the world exclusively devoted to teaching and research in population and health-related issues. The IIPS alumnus is occupying prestigious positions in international and national organizations, universities, development agencies, and non-governmental organizations and has created a brand value for the Institute. The Institute runs several research activities in collaboration with international and national research institutes/organizations and universities.

The Institute plays a pivotal role in planning and development of the country by generating valuable health and development indicators through large scale nationwide sample surveys at state and district level and is a National Nodal Agency for conducting prestigious surveys like NFHS (DHS-India), DLHS, LASI, SAGE, GATS, and Youth Study. Until 2018, the Institute has trained 3953 students (3275 from India and 678 from 41 different countries) through various courses.

Workshop Overview

In the era of digital data, coding and analytics, students/practitioners of different disciplines must have knowledge of basic coding to venture into the dynamic world of data-driven decision making. ‘Introduction to Python Programming’ workshop is designed for non-programmers to get the flair of coding that will further help them to undertake advanced-level coding courses in future. Python is a very powerful open-source language, which is capable of doing phenomenal data management and analysis tasks.

Relevance of the Workshop

The learnings are directly applicable to contemporary job roles in corporate/government/non-profit organizations in the field of data handling and analytics. The learnings can be effectively utilized in project/research work as well.

Dates

March 01-05, 2023

Venue

ICT Unit Lab, International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai-400088, Maharashtra, India

Who can Apply

Research Students/Academicians/Professionals working in the field of applied econometrics/statistics/mathematics/demography/population studies and public health.

Workshop Outcomes

After completion of this workshop, the participants are expected to

- Apply coding and write programs in Python
- Use python coding for string extraction, manipulation and data handling
- Apply different in-built modules such as math, random and Regular Expressions for computation and analysis purpose
- Apply different data analysis modules such as NumPy, Pandas for exploring and analyzing data
- Analyze data using various visual representations and descriptive measures

Intake capacity

Maximum 30

Course fee

Rs.3000/-

What we provide

Access to computer lab, stationary kit, course material in soft form, tea and lunch during workshop days, and certificate on successful completion.

Important Dates

Last date to submit application: 05/02/2023

Announcement of selected candidates: 07/02/2023

Session Details

Day	Session	Topic	Detailed Content
Day 1	Session-1 (90 minutes)	Introduction to Python Programming	Introduction and Installation of Anaconda platform, The Python Shell, Use of a text editor , Jupyter Notebook, Spyder, Executing Python scripts, Basic Syntax, Variables, Data Types, Operators
		Variables, Data Types, Operators	
	Hands-on practice (90 minutes)		
	Session-2 (90 minutes)	Conditional Statements, Looping, Control Statements	Conditional Statements: if, elif, else Nested if-else, catching exceptions “try and except”
			Looping: For, While, Nested loops Control Statements: Break, Continue, Pass
			Control Flow Statements Functions
Hands-on practice (90 minutes)			
Day 2	Session-1 (90 minutes)	File Handling	File Handling: Opening files, Reading files, Searching through a file, Writing files
		String Manipulation	String Manipulation: Accessing Strings, Basic Operations, String Slices, looping and counting, String Methods, Parsing strings
	Hands-on practice (90 minutes)		
	Session-2 (90 minutes)	Lists Dictionaries Tuples	Lists: Introduction, Accessing Lists, Operations, Working with Lists, Functions and Methods
			Dictionaries: Introduction, accessing values in Dictionaries, Working with Dictionaries, Properties, Functions Tuples: Introduction, Accessing tuples, Operations, Working with Tuples, Functions and Methods
	Hands-on practice (90 minutes)		
Day 3	Session-1 (90 minutes)	Function Modules	Functions: Built-in functions, defining a function, Calling a function, Function Arguments
			Modules: Importing a Module, Math Module, Random Module, Regular Expression Module
	Hands-on practice (90 minutes)		
	Session-2 (90 minutes)	Regular Expressions (RE)	Regular Expressions (RE): Character matching using RE, extracting data using RE
	Hands-on practice (90 minutes)		
Day 4	Session-1 (90 minutes)	NumPy	NumPy Ndarray-Creating NumPy arrays, types of data, the dtype option, intrinsic creation of an array, Operations on NumPy Arrays, arithmetic operators, the matrix product, increment and decrement operators, universal functions (ufunc), aggregate functions, indexing an array, Slicing arrays, iterating an array, shape manipulation, Array manipulation- splitting and joining arrays, Reading and writing array on data files.
	Hands-on practice (90 minutes)		
	Session-2 (90 minutes)	Pandas	Pandas Introduction to Pandas data structures, Creating series, Creating DataFrames, Adding data, Saving DataFrames, Indexing methods, Slicing a DataFrame, Arithmetic methods with DataFrames, Reading and Writing Data, I/O API tools, CSV and Textual files, Reading Data in CSV or Text Files, Writing Data in CSV, Reading and Writing Data on MS-Excel Files
	Hands-on practice (90 minutes)		
Day 5	Session-1 (90 minutes)	Descriptive Analytics using Python	Descriptive Analytics using Python Loading a dataset into Pandas DataFrame, displaying records of the DataFrame, Value Counts and Cross Tabulations, Sorting values by columns, Creating New Columns, Filtering Records Based on Conditions, Summary measures
	Hands-on practice (90 minutes)		
	Session-2 (90 minutes)	Data Visualization using Matplotlib library	Exploration of data using visualization (Using Matplotlib library), Bar chart, Histogram, Distribution or Density Plot, Box Plot, scatter plot, pair plot, correlation and heat map
	Hands-on practice (90 minutes)		

PATRON

Prof. K.S. James, Director & Sr. Professor, IIPS

Workshop Co-ordinators

Prof. S.K. Singh

Prof. Laxmikant Dwivedi

Dr. Preeti Dhillon

Dr. Guru Vasishtha

For any queries, contact: vasishtha@iipsindia.ac.in

Resource Person:



Dr. Tina Dutta

Dr. Tina Dutta is Assistant Professor and FDP Coordinator in the School of Business at AURO University, Surat. By academic training, she is a statistician, a demographer and a social science researcher. She is a Fellow (PhD) from Indian Institute of Management, Calcutta. Dr. Tina has been actively involved in teaching, training and curriculum-development of subjects such as, Business Statistics, Quantitative techniques, Business Analytics, Econometrics, Time-series modeling and forecasting, Research Methodology, Data Science using Python, Data Analytics using Power BI, Operation Research, Value added courses on SPSS, and STATA.

Application link:

[Workshop On "Introduction on Python Programming" \(google.com\)](#)

Workshop agenda

Day 1: 6 Sept 2022

Registration: 1:45 pm to 2:05 pm

Inauguration: 2.05 pm to 2.15 pm

Welcome address by Prof. K.S. James (IIPS director)

Welcome remarks by Prof. Valerie Golaz (INED research director)

Part 1: Overview of gridded population data (2.15 pm - 3.45 pm)

- Overview
- Need
- Merits and limitations

Break: tea/coffee with snacks

Part 2: Retrieving gridded population data (4.15 pm to 5.45 pm)

- Techniques of estimation
- Various sources and components of data
 - Downloading steps

Day 2: 7 Sept 2022

Part 1: Processing gridded population data (2.15 pm - 3.45 pm)

- Opening gridded data in GIS environment
 - Reading data
- Geo-processing at desired administrative levels

Break: tea/coffee with snacks

Part 2: Extraction of gridded population data (4.15 pm to 5.45 pm)

- Raster calculations
- Exporting data in desired format
- Closing remarks and interaction



International Institute for Population
Sciences Alumni Association (IIPSAA)



&
International Institute for Population Sciences (IIPS)

are organizing an offline
FIVE DAYS WORKSHOP

on

‘A Hands-on Training of SPSS: Basics to Advanced Techniques’

April, 26 - 30, 2023



Venue: IIPS, Mumbai

Application Deadline: 20th April, 2023

Seats Available: 30

Register here



For more information Email : alumni.iipsaa@gmail.com

<https://forms.gle/2KY4xmZDEicKBvjAA>

About IIPSAA

A professional body of IIPS-trained population graduates, termed IIPS Alumni Association (IIPSAA), was engendered and registered by faculties and the alums of the Institute under the Society Registration Act 21, 1860 (Regd. No. 2893/2011/GBBSD) and the Charity Commission Act 1950 (Regd. No. F49222-Mumbai). The IIPS alums hold distinguished positions in several organizations such as Child Fund, Indian Institute of Health Management Research, International Centre for Research on Women, Population Council, Population Service International, Public Health Foundation of India, Tata Institute of Social Sciences, United Nations Population Fund, United Nations Children's Fund, World Health Organization, and National Council of Applied Economic Research. In addition, several IIPS alums are recruited in different national and international universities and colleges. IIPSAA vigorously organizes several activities, including lectures, workshops, and debates for students, encouraging them to connect with eminent personalities who are experienced professionals in various fields related to population sciences.

Objective of the Workshop

The motivation behind this training session is to introduce the basics of SPSS to the **working professionals (Age above 35)** who are interested in data analysis but need more computation and statistical analysis using the software. This course would benefit faculty members of colleges and universities, management executives, Industry training professionals, and research scholars who wish to enhance their understanding of this subject. Experts with knowledge of all aspects of the SPSS will train the participants on various statistical analysis topics, data mining, and interpretations. The workshop will focus on practical learning through case studies which will enable the participants to practice what they learn through the workshop.

Certificate

The certificate will be given to the participants after successfully completing the course conducted by Resource persons and IIPSAA.

Resource Persons



Dr. C. P. Prakasam is a retired Professor with over 30 years of experience in Demography. He has expertise in Public Health, Mortality, Bio-Statistics, and Computer Applications in Demographic Data analysis. He has published several research papers, supervised 10 Ph.D. students in Population Studies, and completed 35 research projects funded by various organizations. He has organized workshops on Population Data Bases and Development of Knowledge assets through e-books. Dr. Prakasam has been involved in NFHS, POPIN, POPLINE, and PO-ENVIS projects and has visited several countries for teaching and training programs. He is an ex-President of IASSH and ex-Vice President of IASP, and shares his knowledge on SPSS and Population Studies through his YouTube channel and blog.

Dr. Sulabha Parasuraman is a retired Professor and Head of the Department of Population Policies and Programmes at the International Institute for Population Sciences in Mumbai. She holds a post-graduate degree in Statistics and a Ph.D. in Demography from Mumbai University. Dr. Parasuraman has guided several M.Phil. and Ph.D. students' dissertations and was actively involved in constructing the Population Clock of IIPS. After retirement, she served as a consultant with UNICEF, NAANDI Foundation, and Tata Institute of Social Sciences. She was also a member of various committees constituted by the Ministry of Health and Family Welfare, with her areas of interest being evaluation of health and family welfare programs, population projections, and large-scale sample surveys.



Dr Sayeed Unisa is currently working as a Professor at the International Institute for Population Sciences (IIPS), Mumbai. She holds PhD degree from IIPS, Mumbai and two Master's degrees from Osmania University, Hyderabad (Statistics and Education). Her research interests are nutrition, gender, infertility, health and education. She carried out cross-sectional, impact evaluation and longitudinal studies in most of the states of India with funding from UNICEF, WHO, World Bank, Ford Foundation and the Government of India. Prof Unisa has published more than 100 articles in refereed journals and six books. Dr Unisa is the recipient of prestigious awards in population studies.

Dr. Kunal Keshri is an Assistant Professor at the Department of Migration and Urban Studies at the International Institute for Population Sciences in Mumbai. He holds a Master's Degree in Geography from Delhi School of Economics, and an M.Phil. and Ph.D. in Population Studies from the International Institute for Population Sciences. Dr. Keshri's research interests include migration and development, urbanization and environment, public health, nutrition, maternal and child health, and population ageing. He has published extensively in international and national journals and edited books, and has served as a consultant to UNFPA and the Population Council. Currently, he is involved in several research projects funded by ICSSR, and University of Aberdeen, UK.



Dr Illias K. Sheikh is trained as a demographer with interest in demographic data & methods, large scale surveys, fertility, family planning, reproductive health, maternal & child health, maternal mortality and ageing. Dr. Sheikh has been affiliated as an Assistant Professor with IIPS, Mumbai. Much of his work is focused on reaching the poorest and most vulnerable populations with interventions and evaluating national efforts to improve maternal and child health. Dr. Sheikh has more than 30 publications. He has received a number of fellowships and awards throughout his academic career from various national and international organizations, including 'Best Young Researcher Award' in 2019. Dr. Sheikh has also been associated with several professional associations such as the IUSSP, France; WPHNA, UK; ACAMH, UK; IAPHS, US etc.



Important Dates

- Date of Training : **26th - 30th April, 2023**
- Last Date to Receive Application : **20th April, 2023**
- Date For Sharing the Final List of Participants : **21st April, 2023**
- Last date payment: **25th April, 2023**

Organizing Committee

Workshop Coordinators

Prof. Sayeed Unisa
Prof. R. Nagarajan
Prof. Nandita Saikia

IIPSAA Management Team

Patron: Prof K S James
President: Prof. Irudaya Rajan S.
Vice-President: Prof. Sayeed Unisa
Prof. R. Nagarajan
General Secretary: Prof. Nandita Saikia
Joint Secretary: Dr. A. M. Guntupalli
Treasurer: Prof. Dhananjay W. Bansod
Joint Treasurer: Dr. Dilip T. R.

Members:

Prof. A. K. Sharma
Dr. Bashir A. Bhat
Dr. Sucharita Pujari
Dr. Kunal Keshri
Dr. Sandhya R. Mahapatro
Dr. Illias Kanchan Sheikh

Registration & Course fee

Registration/ Course fee for this workshop:

- IIPSAA Member- 2000
- Non-Member- 3000

Note: The registration fee includes the workshop kit, Lunch and evening Tea (every day). Limited accommodation is available at the IIPS hostel at a nominal price. Participants are supposed to pay themselves for the accommodation. Breakfast and dinner can be taken from the IIPS hostel mess by paying the daily coupon price.

Fill Google form on or before 20th April, 2023. The final list of participants will be decided by the IIPSAA and selected participants will be informed by 21st April, 2023.

[Google form link](https://forms.gle/2KY4xmZDEicKBvjAA)

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