St. John's Medical College & Research Institute

Live Online

FUNDAMENTALS OF R-PROGRAMMING

ST. JOHN'S MEDICAL COLLEGE

OVERVIEW

This course aims to aid individuals in the field of health science, health policy and health administration who are keen on developing their knowledge in quantitative research methods and building computation skills under an open-source platform.

OBJECTIVES

Through the completion of this course, individuals will be able to

- Understand the fundamentals of R, a widely known open-source language.

- Explain the basic ideas of programming in R, such as functions, variables, data types, pipelines, and vectors.

- Create summary tables using R

- Create bar charts, histograms, pie charts, scatter plots, line plots, box plots, and maps using R

- Conduct data analysis

DURATION

Weekly 2 classes on Monday and Friday, 2 hours each for 12 weeks from
02 **FEB 2024 - 03 MAY 2024.**
Time: 6pm - 8pm IST
Registration closes on 30th JAN 2024

PRE-REQUISITE

Basic knowledge in mathematics

MATERIALS

Lectures and course handouts will be provided.

EVALUATION

Credit will be given for completing all assigned weekly homework exercises.

FEES

Rs 11,800(Including GST) /-

MODE

Online - Microsoft Teams

CONTACT

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Mobile: +91 9538147676
Email: biostatws@stjohns.in

SYLLABUS
Introduction, Installation, and orientation
Basic operations and data structures in R
Data import, export, and manipulation
Control Structures and Repeat Operations
Functions in R
Learning Debugging through developing and using user-defined functions in R
Data Visualization using Base R
Data Visualization using ggplot2
Exploratory data analysis in R
Statistical inference using R
Multivariate data analysis using R
A case study using R

Evaluation Scheme	
Topic	**Method**
Basic operations in R	Assignment
Data manipulation and control structures	Assignment
Functions and debugging	Assignment
Visualization	Assignment
Statistical analysis	Assignment
All topics	Final Exam

REGISTRATION

1. Pay course fee through NEFT
2. Complete registration by filling the google form.

www.stjohns.in/www.sjri.res.in

Registration closes on 30th JAN 2024
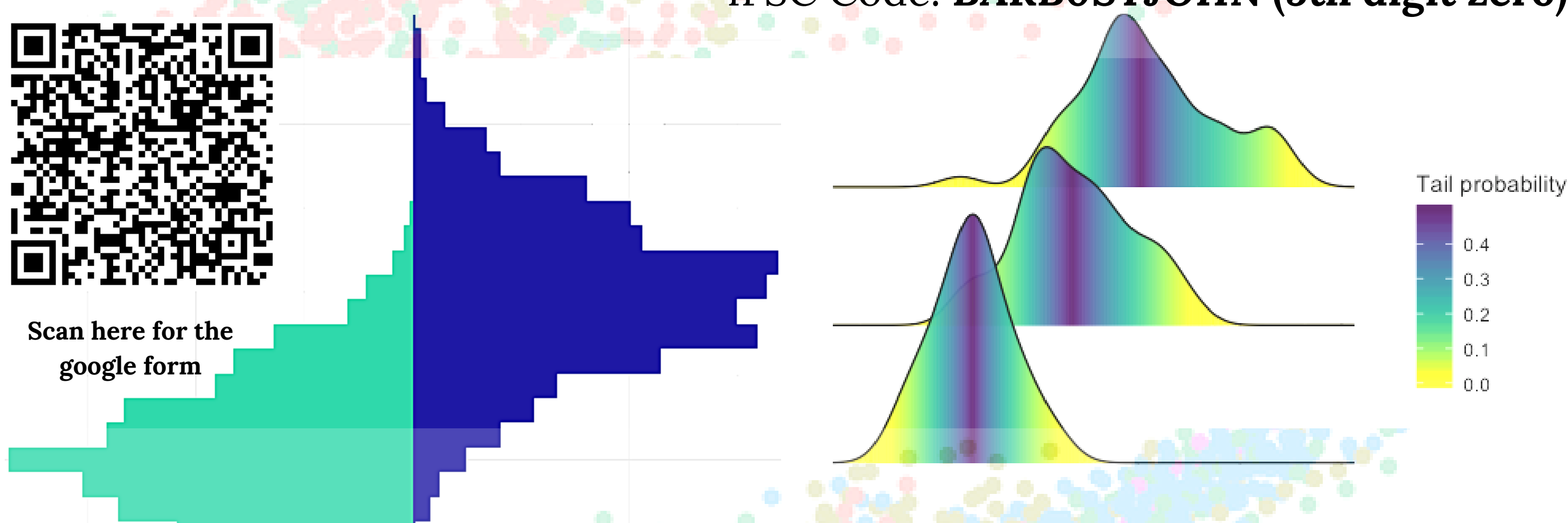
ACCOUNT DETAILS

Beneficiary name: St. John's Research Institute
Bank name: Bank of Baroda
Beneficiary's Bank A/c#: **05210100024920**
Branch: John Nagar
IFSC Code: **BARB0STJOHN (5th digit zero)**

Scan here for the google form

Tail probability
0.4
0.3
0.2
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COORDINATORS

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