PSGCenter for AcademicResearch and Excellence

Organizes

Faculty Development Programmeon

Data to Decision: Science Behind Numbers

30 – 31 January 2026

Name:.....

Gender: Male / Female

Designation :.....

Department :.....

Organization :.....

Address:.....

.....

Mobile:.....

Email:.....

Online Payment reference No. : .....

Bank Name: .....

DateofTransfer:.....

Amount : .....

Filled-in registration form must be scanned and sent to skl.eee@psgtech.ac.in

DECLARATIONBYTHECANDIDATE:

Thegiveninformationistruetothebestofmyknowledge. I agree to abide by the rules and regulationsgoverning the program. If selected, I shall attend thecoursefortheentireduration.

Place:

Date:

Signatureof the Participant

REGISTRATION

Researchscholars	Rs.750/-+18% tax
Faculty for Academic Institutions other than PSG	Rs.1000/-+18% tax
Industries	Rs.1250/-+18% tax

ForPSGFacultymembers, theregistrationisfree

ACCOUNT DETAILS FOR ONLINE PAYMENT

AccountName :**PSG Center for Non formal and Continuing**

EducationBankName :**Central Bank of India**

Branch :**Peelamedu**

AccountNumber:**1481267367**

IFSCCode :**CBIN0280913**

MICRCode :**641016006**

DATES TO REMEMBER

Last date for registration:19- 01-2026Intimationof Selection : 23-01-2026

FOR ANY QUERIES, CONTACT:

Secretary

PSG Center for Academic Research and Excellence

Ph:7639644312

Email: secretary@psgcare.org

PSG CENTER FOR ACADEMIC RESEARCH AND EXCELLENCE

Faculty Development Programme on

Data to Decision: Science Behind Numbers

30 – 31 January 2026

OrganizedBy

PSG Center for Academic Research and Excellence Coimbatore -641 004.

Phone: 0422 - 4344575

www.psgcare.org

ABOUT PSG CARE

The **PSG Center for Academic Research andExcellence**wasfoundedinOctober,2015byt hePSG & Sons Charities Trust with a mission topromote teaching excellence in all the collegesunder the Trust. Toward this end, CARE willencouragetheuseoflearner-centricpedagogicalpracticesthatfacilitateeffecti velearning and will foster dialogue and reflectiononeffectiveteachingthroughworkshop s,seminars,one-to-oneconsultationandotheractivities. The center also focuses on creatingandsustainingeffectivefacultystudentrel ationships.

ABOUT THE FDP

The workshop “Data to Decision: Science Behind Numbers” is designed to bridge statistical theory, analytical techniques, and real-world decision-making. It aims to equip participants with the conceptual understanding and methodological tools required to interpret data rigorously, extract meaningful patterns, and translate quantitative evidence into actionable insights.

This workshop will empower participants to transform numerical data into meaningful insights and strategic decisions. Through an integrated blend of statistics, analytical modelling, and data mining concepts, the programme enables learners to understand data behaviour, identify hidden patterns, and develop evidence-based interpretations.

COURSE CONTENT

The **Statistical Foundations** module will focus on descriptive statistics for data characterization and inferential statistics for hypothesis-driven reasoning using confidence intervals and significance testing.

The **Data Mining and Pattern Discovery**module introduces the conceptual scope of data mining and its relevance to modern analytics ecosystems. Techniques such as clustering and classification will be discussed with respect to pattern discovery, knowledge extraction, and predictive modeling.

The **Dimensionality Reduction** module will explain the challenges associated with high-dimensional datasets and the resulting computational and analytical constraints. Techniques including Singular Value Decomposition (SVD) and Principal Component Analysis (PCA) will be explored as mechanisms for feature compression and structure preservation. The workshop concludes with regression analysis, highlighting its role in modelling relationships, interpreting trends, and supporting quantitative decision frameworks.

EXPECTED OUTCOMES

Participants will be able to:

- Interpret data scientifically
- Apply statistical reasoning
- Discover patterns using analytics
- Use models for informed decision-making

RESOURCE PERSON

simply as Varahan—has been a distinguished academician in the School of Computer Science at University of Oklahoma, an established public research university located in Norman. He served for over four decades as George Lynn Cross Research Professor and faculty member, contributing significantly to computational science, data analytics, parallel processing, dynamic data assimilation, and learning algorithms.

Dr. Lakshmivarahan`s academic career includes a Ph.D. from the Indian Institute of Science, extensive research publications, authorship/co-authorship of books, and supervision of numerous doctoral and master’s theses.

Dr. Lakshmivarahan is a Fellow of both the IEEE and the ACM and has received multiple awards for teaching and research excellence during his tenure at the University of Oklahoma

WHO CAN ATTEND

- Research Scholars
- Faculty Members
- Professionals working with data