JioInstitute

DATA VISUALIZATION
WORKSHOP
5th & 6th December, 2022

Our
Founders

Smt. Nita Ambani
Founder & Chairperson,
Reliance Foundation Institution of
Education & Research

Shri Mukesh Ambani
Chairman & Managing Director,
Reliance Industries Limited

Our
Leaders

Dr. R. A. Mashelkar
Chancellor, Jio Institute
Padma Vibhushan | Former Director General,
CSIR, Government of India

Dr. Dipak C. Jain
Vice-Chancellor, Jio Institute
Former Dean, Kellogg School of Management,
USA Former Dean, INSEAD, France

Dr. Guruswami Ravichandran
Provost, Jio Institute
Former John E. Goode, Jr., Professor of
Aerospace and Mechanical Engineering,
California Institute of Technology, USA

About
Jio Institute

Jio Institute is a multi-disciplinary higher education institute set up as a philanthropic initiative by Reliance Industries Ltd. and Reliance Foundation. The Institute is dedicated to the pursuit of excellence by bringing together global scholars and thought leaders and providing an enriching student experience through world-class education, and a culture of research and innovation.

Our
Vision

- Be an exemplary Indian academic institution with international repute.

- Build a vibrant ecosystem for research, innovation and entrepreneurship.

- Be India's test bed for frontier research and invention of future technologies.

- Prepare the next generation of leaders and entrepreneurs through holistic development.

- Significantly contribute to the advancement of the Indian society.

- Solve India's problems and solve them fast.

- Provide a lifelong learning experience.

About
Workshop

The field of data visualization goes beyond just displaying pretty charts; it's the process of helping people see, interact with, and better understand data. Whether simple or complex, the right visualization can bring everyone on the same page, regardless of their level of expertise. It's hard to think of an industry that doesn't benefit from making data more understandable.

As data is becoming ubiquitous to any business decision being made, visualization is an increasingly key tool to make sense of the trillions of rows of data generated every day. Data visualization helps tell stories by curating data into a form easier to understand, highlighting the trends and outliers, removing the noise from data, and highlighting useful information. In this workshop, we will have several speakers discuss the state of the art in research and design in the field of data visualization. We will also introduce the audience to Tableau, provide a demo of its features, and a walkthrough of use cases where customers and businesses have benefitted from using Tableau in their own analytical workflows.

Speaker
Profile

DR. VIDYA SETLUR,
**Director Tableau Research and
Visiting Faculty, Jio Institute**

Dr. Vidya Setlur is the Director of Tableau Research. She leads an interdisciplinary team of research scientists in areas including data visualization, multimodal interaction, statistics, applied ML, and NLP. She earned her Doctorate in Computer Graphics in 2005 at Northwestern University. Prior to joining Tableau, she worked as a principal research scientist at the Nokia Research Center for seven years. Her personal research interests lie at the intersection of natural language processing and computer graphics to better understand data semantics and user intent to inform the meaningful visual depiction of data. She recently co-authored a book titled, *Functional Aesthetics for Data Visualization*.

Speaker
Profile

VARUN TANDON,
Principal Solution Engineer - Analytics
Salesforce | India

Varun Tandon has been part of the Solution Engineering Team at Tableau for 6.5 years and has worked in the BI industry for 13+ years. He is a mechanical engineer by education but was drawn to the world of visual analysis. He is fascinated with the intersection of art and science of interpreting data.

Speaker
Profile

DR. VIJAY NATARAJAN,
Professor (IISc)

Dr. Vijay Natarajan is a Professor in the Department of Computer Science and Automation at the Indian Institute of Science, Bangalore. He received his Ph.D. in Computer Science from Duke University and holds a B.E. degree in Computer Science and an M.Sc. degree in Mathematics from BITS Pilani. His research interests include scientific visualization, computational geometry, and computational topology. In his current work he is developing topological methods for time-varying and multi-field data visualization and studying applications in biology, material science, and climate science.

Speaker
Profile

RASAGY SHARMA
Information Designer. Data Artist. Sketchnoter.

Rasagy Sharma is an information designer, data artist & compulsive sketchnoter. Most recently, he was focusing on using Data Storytelling for Product Analytics at Sundial. In the past, he's worked on data-heavy products at Gramener, Mapbox, Barclays, Microsoft & Capillary. He also helped kickstart the Information Design Lab at IDC, IIT Bombay as a RA for Prof. Venkatesh Rajamanickam. He holds an M.Des. in Information & Interface Design from NID, Bangalore, and BE. (Hons) Computer Science Engineering from BITS Pilani, Goa Campus. In his free time, he loves to teach data visualization & cartography, explore creative-coding, & volunteer for design communities.

Speaker
Profile

RAGHAVENDRA G. S.
Ph.D. Student, IISC

Raghavendra G S is a PhD candidate at the Department of Computer Science and Automation, Indian Institute of Science, Bengaluru. He is part of the Visualization and Graphics Lab. His advisor is Prof. Vijay Natarajan. He holds a master's degree in Computer Science - from the Indian Institute of Science, Bengaluru and bachelor's degree in Information Technology -from the National Institute of Technology Karnataka, Surathkal. His research interests include scientific visualization, computational topology, topological data analysis, and their applications.

Speaker
Profile

MOHIT SHARMA
Ph.D. Student, IISC

Mohit Sharma is a Ph.D. student in the Department of Computer Science and Automation at the Indian Institute of Science, Bangalore. He received his B.Tech degree in Information Technology from YMCA University of Science and Technology, Faridabad and M.Tech in Computer Science and Engineering from IIIT, Hyderabad. He worked as a software developer for Mediatek, Amazon and Directi. His research interests include computational topology and its applications. Currently he is working on time-varying multivariate data analysis to understand electronic transitions communities.

5th December
Morning
Agenda

10:00 a.m.	Welcome

10:05 a.m.	Opening and talk: **DR. VIDYA SETLUR,** **Director Tableau Research and** **Visiting Faculty, Jio Institute** - What makes intelligent visual analytics tools really intelligent?

10:45 a.m.	Q&A

11:10 a.m.	**DR. VIJAY NATARAJAN,** **Professor, IISc, Bangalore** - Spatiotemporal Data Analysis and Visualization: A Topological Feature-Directed Approach

11:45 a.m.	Break

12:00 p.m.	**RASAGY SHARMA,** **Information Designer and Data Artist,** **Sundial** - What can design do with data?

12:30 p.m.	Lunch & conversation

5th December
Afternoon
Agenda

02:00 p.m.   Tableau Product , Use Cases , Demo
VARUN TANDON,
Principal Solution Engineer, Tableau

03:30 p.m.   **Dashboard heuristics exercise**

04:00 p.m.   **Student Project Fast Forward Preview**

- Raghavendra and Mohit Sharma, Ph.D. students at IISc working on visualization and computational topology with Vijay Natarajan
- Students of Rasagy Sharma
- Jio Institute student projects

05:00 p.m.   **Closing**
Raffle giveaway of the book:
Functional Aesthetics for Data Visualization

6th December
Agenda

10:00 a.m.	**Welcome**

10:05 a.m.	**Opening and talk: DR. VIDYA SETLUR,** **Director Tableau Research and** **Visiting Faculty, Jio Institute** - What makes intelligent visual analytics tools really intelligent?

10:45 a.m.	**Q&A**

11:15 p.m.	**Tableau Industry Talk and Case Studies** **VARUN TANDON,** Principal Solution Engineer, Tableau

12:45 p.m.	**Closing** - Raffle giveaway of the book: Functional Aesthetics for Data Visualization

Participants **Profile**

Business Consultant

Entrepreneurs & Startup leaders

Marketing Professional

Research and Development Professionals

Project Manager

Business Executive

IT Professionals

Technocrats

Technology Bussiness Leaders

Data Scientists/Enginneers

Innovation Enthusiasts

Programme **Goal**

The goal of the workshop is a better understanding of the state of the art of data visualisation and its impact to real customers and users.