



**FINANCE DEPARTMENT
TAMIL NADU INFRASTRUCTURE DEVELOPMENT BOARD**

**INVITATION OF APPLICATIONS FOR THE POST OF ANALYST/DATA SCIENTIST
BY INDIVIDUAL APPLICANTS**

1. About Tamil Nadu Infrastructure Development Board

The Tamil Nadu Infrastructure Development Board set up under the Tamil Nadu Infrastructure Development Act, 2012 is the nodal agency for infrastructure development in the State of Tamil Nadu. TNIDB plays a critical role in infrastructure development in the State by facilitating project development in a seamless, efficient, and transparent manner. The TNID Act along with the Rules and Regulations thereof provides TNIDB with the necessary administrative authority and lay down a clear framework of processes and procedures to:

- Create an enabling and facilitative environment
- Identify, prioritise, and implement infrastructure projects
- Enable private sector participation where feasible

More about TNIDB can be found at www.tnidb.tn.gov.in

2. About Tamil Nadu Financial Data Analytics Unit

The Finance Department of the Government of Tamil Nadu recognized that a comprehensive understanding and analysis of governance-related data is critical for effective and efficient fiscal management, sustainable planning, budgeting, and policy design. In this context, the Finance Department vide G.O. No. 211 dated 24th June 2024, created an institutional decision support system called the ‘Tamil Nadu Financial Data Analytics (TN FDA) Unit’.

The primary objective of the unit will be to deliver advanced analytical work on financial (revenue and expenditure) and non-financial data (outputs, outcomes), typically-

1. Diagnostics to determine causality and correlations
2. Stress testing, Simulations, and Scenario building
3. Predictive analysis
4. Ad hoc analysis

Remuneration will be competitive with government sector pay scales and will depend on the candidate's experience levels.

TNIDB invites qualified and experienced candidates to apply for the post mentioned below, on a contractual basis for two years;

| S. No | Position | Job Description | Educational Qualifications and Experience |
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| 1 | <p>Analyst - 2 positions</p> <p>The Analyst will play a critical role in problem statement definition, background research and solution design, translation of the functional requirements for the technical team, quality checks, insight generation and storyboarding, visualisation and presentation of output. The ideal candidate should have a strong background in database management, ETL (Extract, Transform, Load) processes, and data warehousing, along with optimising data pipelines and ensuring data accuracy and reliability.</p> | <p>✚ <u>Issue identification and analysis</u></p> <ul style="list-style-type: none"> Actively carries out issue identification and analysis using secondary research and techniques such as root cause analysis, pattern analysis, among others to develop data frames and analytical solutions. Leverages working relationships with the Lead/Data Scientist/Senior Analyst/Economist and other stakeholders to determine data needs and optimal methods for issue identification and analysis. <p>✚ <u>Solution design</u></p> <ul style="list-style-type: none"> Provides input to the Lead on timelines, estimates, risks, deviations, and other challenges during planning and implementation of the project. Collaborates with IT and software development teams to integrate data engineering solutions with existing systems. <p>✚ <u>Research and insights analysis</u></p> <ul style="list-style-type: none"> Performs supporting secondary research and conducts analysis to support project delivery. | <p>✚ Education</p> <ul style="list-style-type: none"> Bachelor's degree in Computer Science, Information Technology, or a related field or a Management Graduate from a reputed institution Proficiency in self-service analytics or visualisation tools like Power BI or Tableau or equivalent Good knowledge of MS Office tools is important. Knowledge of any other productivity tools is a bonus <p>✚ Experience & Expertise</p> <ul style="list-style-type: none"> 5 years' proven experience in Business or Systems or Process Analysis or similar role Experienced in using large and diverse datasets, including real-world data and ability to draw inferences across Expertise in using analytics frameworks for root cause analysis and solution framing Ability to distil volumes of information into easily digestible conceptual frameworks |

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| | <p>The role will report to the FDAU Head / Lead and would require active interaction with other team members typically Economist, Business Analyst and Data Scientist for effective project delivery.</p> | <ul style="list-style-type: none"> Analyses qualitative and quantitative data from a range of literature to provide actionable insights for informed decision making. Keeps abreast of research and findings in key thematic areas within data and technology in India, actively sharing this information with colleagues. Helps in drafting the first level of insights for internal discussion, including storyboarding and communicating insights effectively. Refines the insights basis feedback and prepares output for stakeholder presentations so it is accessible and actionable. <p>+ <u>Data mapping and Transformation</u></p> <ul style="list-style-type: none"> Develops and maintains metadata, data models, data mapping, and transformation documentation to ensure accuracy and consistency over time Works closely with the Data Engineers to gather and analyse data mapping requirements, and ensure efficient Extraction-Transformation-Loading procedures so data is accurately mapped and transformed to meet requirements Collaborates with Data Scientists and | <p>+ Personal Characteristics and Desired Qualities</p> <ul style="list-style-type: none"> Ability to build and maintain positive and collaborative relationships within the organisation Ability to set priorities, plan timelines and meet deadlines. Detail-oriented and ability to manage multiple concurrent tasks Intellectual curiosity and ability/willingness to constantly learn High ability to collaborate and actively listen to others, understanding and valuing others' views Public-spirited and generous temperament Stay abreast of industry trends, emerging technologies, and best practices in data analysis |
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| | | <p>Analysts to understand data structures for optimal analysis</p> <ul style="list-style-type: none">• Stays updated with emerging trends and technologies in data mapping and transformation, while recommending improvements to the FAU's data integration practices <p>✚ <u>Project Management</u></p> <ul style="list-style-type: none">• Oversees the project delivery tasks in association with the Project Lead / Data Engineers and identify risks or dependencies as they arise through the project lifecycle• Reviews outputs, checking against data standards and data quality• Presents / assists Team Lead in presenting the outputs and findings• Conducts workshops / training to functional users, where applicable• Documents functional requirements, business processes, use-cases, and other project artefacts | |
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| 2 | <p data-bbox="277 394 557 464">Data Scientist – 1 position</p> <p data-bbox="277 533 557 1220">The Data Scientist will be responsible for leveraging advanced analytics and machine learning techniques to extract valuable insights from complex data sets. The ideal candidate should possess a strong background in statistics, programming, and machine learning, with the ability to translate findings into actionable business strategies.</p> <p data-bbox="277 1255 557 1759">The role will report to the FDAU Head / Lead and would require active interaction with other team members (Economist, Business Analyst, Data Engineers, etc), senior researchers, consultants and partner organisations for effective project delivery.</p> | <p data-bbox="586 394 1003 464">✚ Problem Statement formulation</p> <ul data-bbox="586 470 1003 1887" style="list-style-type: none"> <li data-bbox="634 470 1003 827">• Participates actively in the formulation of the problem or the objective statement, along with the Lead / Business Analyst and the Economist including, but not limited to, technical / modelling or data constraints <li data-bbox="586 869 1003 938">• Data Collection and Preparation <ul data-bbox="634 945 1003 1520" style="list-style-type: none"> <li data-bbox="634 945 1003 1302">• Collaborates with Data Engineers/Analysts to collect, clean, and preprocess large volumes of structured and unstructured data from various sources including databases, APIs, spreadsheets, etc for analysis <li data-bbox="634 1308 1003 1377">• Ensures data availability and quality <li data-bbox="634 1383 1003 1520">• Creates the analysis dataset, including creation of derived variables <li data-bbox="586 1562 1003 1631">• Statistical Analysis and Modeling <ul data-bbox="634 1638 1003 1887" style="list-style-type: none"> <li data-bbox="634 1638 1003 1887">• Works with the Economist in assessing various modelling strategies and finalising the appropriate one (model, methodologies, etc), clearly | <p data-bbox="1036 394 1214 426">✚ Education</p> <ul data-bbox="1036 432 1443 1014" style="list-style-type: none"> <li data-bbox="1036 432 1443 646">• Postgraduate in Quantitative discipline (Mathematics / Statistics) or Economics or other data centric disciplines from a reputed institution <li data-bbox="1036 653 1443 722">• Skilled in using tools like R, Stata, Python <li data-bbox="1036 728 1443 865">• Skilled in machine learning algorithms, statistical modelling, and data analysis. <li data-bbox="1036 871 1443 1014">• Familiarity with big data technologies and distributed computing (e.g., Spark) is a plus. <p data-bbox="1036 1050 1406 1081">✚ Experience & Expertise</p> <ul data-bbox="1036 1087 1443 1887" style="list-style-type: none"> <li data-bbox="1036 1087 1443 1302">• 4 to 6 years’ proven experience in statistical modelling and analysis, especially involving Government’s administrative datasets <li data-bbox="1036 1308 1443 1409">• Skilled in handling large and disparate datasets, including real-world data <li data-bbox="1036 1415 1443 1667">• Experience of designing experiments, testing hypotheses, building models, conducting advanced and complex multi-dimensional data analysis <li data-bbox="1036 1673 1443 1887">• Demonstrated experience of application of advanced statistical, predictive modelling, machine learning techniques to build, maintain, re- |

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| | | <p>documenting the reason for the choice and the expected outcomes</p> <ul style="list-style-type: none"> • Applies strategy / model development methodology and testing to the analysis dataset • Develops and implements machine learning models to predict outcomes and identifies patterns, where appropriate • Uses machine learning models developed to build predictive models and classifiers, tuning parameters for optimal performance • Optimises models for performance and scalability <p>✚ Exploratory Data Analysis</p> <ul style="list-style-type: none"> • Performs Exploratory Data Analysis (EDA) to understand characteristics of data including visualising data distributions, identifying outliers, and uncovering preliminary patterns in data • Prepares the initial draft of insights/presentation for internal discussion • Identifies relevant features and variables to enhance model accuracy • Collaborates with the Economist or other domain experts to incorporate industry-specific knowledge into analyses | <p>calibrate, and redevelop models / algorithms</p> <ul style="list-style-type: none"> • Strong problem-solving skills and the ability to think critically about business challenges • Excellent communication skills with the ability to explain complex concepts to non-technical stakeholders <p>✚ Personal Characteristics and Desired Qualities</p> <ul style="list-style-type: none"> • Ability to build and maintain positive and collaborative relationships both within and outside the organisation • Ability to set priorities, plan timelines and meet deadlines. • Intellectual curiosity and ability/willingness to constantly learn • High ability to collaborate and actively listen to others, understanding and valuing others' views • Public-spirited and generous temperament • Continuous Learning and Research <ul style="list-style-type: none"> ○ Stay abreast of the latest developments in data science, machine learning, and related fields. ○ Contribute to research activities and evaluate emerging technologies for potential implementation |
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| | | <ul style="list-style-type: none"> ✚ Data Insight and Visualization <ul style="list-style-type: none"> • Collaborates with the Business Analyst/Economist to interpret the results of analyses and models, to provide actionable insights assisting the organisation to make effective decisions • Creates visualisations to effectively communicate complex findings and insights to stakeholders to convey trends, patterns, and anomalies • Develops interactive dashboards for ongoing monitoring and reporting, where needed | |
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3. REMUNERATION:

Remuneration would be based on similar roles in other public organizations.

4. LAST DATE FOR SUBMISSION

All applications shall be sent by email to soinfra.findpt@tn.gov.in, fininfracell@gmail.com and through post to the undermentioned address in the prescribed format.

5. Interested candidates are requested to submit their application <[here](#)>

**The Chief Executive Officer,
Tamil Nadu Infrastructure Development Board,
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Egmore, Chennai-8**

Last date for receipt of application is 24.01.2025