Lead Data Scientist

Data scientists at Thoughtworks are responsible for leading and executing data science projects. They employ their profound expertise in statistics, modeling, machine learning algorithms and data mining methodologies. They integrate this expertise with a comprehensive understanding of related domains to render business value and illuminate data-driven insights, facilitating clear and effective decision-making processes. Their responsibilities encompass devising strategies, executing plans, operationalizing solutions and articulating the tangible business outcomes achieved. Collaborating with cross-functional teams is pivotal, as they adeptly convey their discoveries to both technical and non-technical stakeholders. They stay up-to-date with industry advancements, ensure data quality and security, and provide guidance to junior team members.  
  
As a data scientist at Thoughtworks, you'll work on a range of projects and leverage deep technical knowledge to solve complex business problems.  
  
Thoughtworks Singapore will be shortlisting applicants who have a current right to work in Singapore i.e. Singapore Citizens and Singapore Permanent Residents only due to the nature of our project in the public sector.

Job responsibilities

* You will lead and manage data science projects from inception to completion, including goal-setting, scope definition and ensuring on-time delivery with cross team collaboration.
* You will collaborate with stakeholders to understand their strategic objectives and identify opportunities to leverage data and data quality for enabling AI and machine learning.
* You will be responsible for the overall AI system design, problem framing and governance, identifying and managing risks and issues.
* You will design, develop and implement data science strategies that drive measurable business results.
* You will design experiments for the team to rapidly test ideas and assumptions, and identify future courses of action.
* You will use quality metrics to select machine learning models that will be deployed in the production environment.
* You will communicate technical findings and insights to stakeholders in a clear, easy and concise way, keeping the stakeholders in mind.
* You will contribute to the growth of the data science community along with promoting a culture of data literacy within the organization.
* You will address ethical concerns and adhere to ethical guidelines using FATTER AI (fairness, accountability, transparency, trustworthiness, explainability, responsibility).
* You will work with CD4ML practices and data versioning tools.

**Job Qualifications**Technical Skills

* You have experience in leading the analysis and modeling of different datasets and overseeing an inception to deploying and productionizing the models.
* You have experience with statistical modeling, hypothesis testing, machine learning, deep learning, optimization and other data science techniques to implement end-to-end data science projects.
* You understand the specialized areas of AI and possess a speciality with at least one of them (i.e.: NLP/computer vision/Generative AI, etc).
* You have experience with R, Python or equivalent statistical/data analysis tools and can write production-ready code that is easy to evolve and test.
* You gather and preprocess large volumes of structured and unstructured data from various sources, ensuring data quality and integrity.
* You analyze datasets using statistical and visualization techniques to identify patterns, trends and relationships.
* You develop and implement machine learning models, algorithms and predictive analytics to solve specific business problems or improve existing processes.
* You evaluate model performance using appropriate metrics and validate models to ensure robustness and reliability.
* You interpret and effectively communicate findings and insights to non-technical stakeholders through reports, presentations and visualizations.
* You ensure compliance with data privacy regulations and ethical standards when handling sensitive information.

Professional Skills

* You understand the importance of stakeholder management and can easily liaise between clients and other key stakeholders throughout projects, ensuring buy-in and gaining trust along the way.
* You are resilient in ambiguous situations and can adapt your role to approach challenges from multiple perspectives.
* You don’t shy away from risks or conflicts, instead you take them on and skillfully manage them.
* You are eager to coach, mentor and motivate others and you aspire to influence teammates to take positive action and accountability for their work.
* You enjoy influencing others and always advocate for technical excellence while being open to change when needed.
* You are a proven leader with a track record of encouraging teammates in their professional development and relationships.
* Cultivating strong partnerships comes naturally to you; You understand the importance of relationship building and how it can bring new opportunities to our business.

Four rounds:

HR, pair coding, technical solution architecting white board, leadership HR in greater details,

Open source contribution from TW- data mesh

Architecture developed by thoughtworks

Not any specific project experience

Public sector industry- in sg

Different phases of the project- strategy, poc, development e2e experience, cross functional

Client facing role- work across teams

Influencing is important, some presales

Tech solution heavy

Public sector industry- infra related

Translate challenges of CI/CD to problem- extensive hands on experience is good to have but at the very least should be able to understand the underpinnings of MLOps

Only 13th month- 182+ is largely ambitious

Next round- Pair coding

Case study- will be given 1~2 days prior, environment will also be given (anu mentioned python or pyspark) and during the discussion some coding will be asked. Deck with all details will be shared later.

Implementation in python:

Ml algorithms- Sebastian python ml,

Deep learning- pytorch

GenAI- Sebastian

AI engineering- Chip