UNIVERSITY OF SOUTHERN CALIFORNIA

Associate Data Scientist

Job Code: 185559

OT Eligible: **No**

Comp Approval: **9/3/2021**

JOB SUMMARY:

Utilizes analytical, statistical, and programming skills to collect, analyze, and interpret large data sets. Assists with the identification of data-analytic problems, determining the correct data and discovering solutions.

JOB ACCOUNTABILITIES:

*E/M/NA	% TIME	
_____	_____	Identifies, mines, and analyzes medium and large data sets to drive university business and solve data-analytic problems. Helps build, iterate, and validate predictive models and develop statistical and machine-learning models. Partners closely with stakeholders to identify high-impact data applications and help drive effective decision-making.
_____	_____	Utilizes data science best practices to effectively solve problems, testing, deploying and iterating solutions. Helps build, execute and evaluate A/B tests. Performs data manipulation, cleansing, and analysis as needed, improving data quality and providing feedback to ensure its adequacy, accuracy, and legitimacy.
_____	_____	Monitors project progress, tracking activity, resolving issues, recommending actions, and providing stakeholders with regular updates on status and deliverables. Drafts reports and presentations providing overviews of methodology and conclusions. Supports continuous improvements by maintaining currency with new technologies and leveraging the latest industry knowledge to continually develop skills, knowledge, and abilities.
_____	_____	Promotes an environment that fosters inclusive relationships and creates unbiased opportunities for contributions through ideas, words, and actions that uphold principles of the USC Code of Ethics.
		Performs other related duties as assigned or requested. The university reserves the right to add or change duties at any time.

***Select E (ESSENTIAL), M (MARGINAL) or NA (NON-APPLICABLE) to denote importance of each job function to position.**

EMERGENCY RESPONSE/RECOVERY:

Essential: ☐ No

☐ Yes In the event of an emergency, the employee holding this position is required to "report to duty" in accordance with the university's Emergency Operations Plan and/or the employee's department's emergency response and/or recovery plans. Familiarity with those plans and regular training to implement those plans is required. During or immediately following an emergency, the employee will be notified to assist in the emergency response efforts, and mobilize other staff members if needed.

JOB QUALIFICATIONS:

Minimum Education:

Bachelor's degree

Combined experience/education as substitute for minimum education

Minimum Experience:

2 years

Minimum Field of Expertise:

Experience using statistical computer languages (e.g., R, Python, SQL) to manipulate data and draw insights from large data sets. Experience working with and creating data models and data architecture, and using data visualization tools (e.g., Tableau, ArcGIS, D3.js). Knowledge of current data modeling tools and various machine-learning techniques and algorithms (e.g., clustering, decision-tree learning, artificial neural networks). Experience scripting and programming in several languages with common data science toolkits. Proficient use of query languages (e.g., SQL, MDX) and experience working with relational (e.g., MySQL, SQL Server, Oracle, Snowflake, Redshift) and non-relational (e.g., Mongo, NoSQL) databases. Knowledge of applied, statistical concepts and techniques skills (e.g., distributions, statistical testing, regression). Excellent written and oral communication skills. Ability to provide both detailed information and summaries to management-level individuals and groups. Experience developing customer relationships and delivering customer-focused service. Proven problem-solving and decision-making skills, and the ability to uncover root cause and evaluate different solution options.

Preferred Education:

Bachelor's degree

Preferred Experience:

4 years

Preferred Field of Expertise:

Bachelor's degree in applied math, data science, computer science, statistics, or related field. Experience in data science, analytics, IT, cognitive engineering, or related fields. Demonstrated interest in data science and artificial intelligence, and experience in open domain (e.g., GitHub). Published writing on artificial intelligence and/or data science. Ability to write high-quality Python code. Familiarity with unit testing, source control and code review.

SIGNATURES:

Employee: _____ **Date:**_____

Supervisor: _____ **Date:**_____

The above statements are intended to describe the general nature and level of work being performed. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of personnel so classified.

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