USC University of Southern California

Associate Data Scientist
Job Description

JOB INFORMATION

Job Code:	185559
Job Title:	Associate Data Scientist
FLSA Status:	Exempt
Supervisory:	
Job Family:	Business Data Analysis
Job Family Group:	Data Analysis
Management Level:	7 Individual Contributor

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 QUALIFICATIONS:

Education

Req	Pref	Degree	Field of Study	
X		Bachelor's degree		
	X	Bachelor's degree		
	X	Bachelor's degree	Applied Mathematics	Or
	X	Bachelor's degree	Computer Science	Or
	X	Bachelor's degree	Statistics	

Additional Education

Check here if experience may substitute for some of the above education.

X	Combined experience/education as substitute for minimum education

Work Experience

Req	Pref	Work Experience	Experience Level	
X		2 years		
	X	4 years		

Additional Work Experience

Check here if education may substitute for some of the above work experience.

	Combined experience/education as substitute for minimum work experience

Knowledge, Skills and Abilities

Req	Pref	Functional Skills
X		Experience using statistical computer languages (e.g., R, Python, SQL) to manipulate data and draw insights from large data sets.

Knowledge, Skills and Abilities

Req	Pref	Functional Skills
X		Experience working with and creating data models and data architecture, and using data visualization tools (e.g., Tableau, ArcGIS, D3.js).
X		Knowledge of current data modeling tools and various machine-learning techniques and algorithms (e.g., clustering, decision-tree learning, artificial neural networks).
X		Experience scripting and programming in several languages with common data science toolkits.
X		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.
X		Knowledge of applied, statistical concepts and techniques skills (e.g., distributions, statistical testing, regression).
X		Excellent written and oral communication skills.
X		Ability to provide both detailed information and summaries to management-level individuals and groups.
X		Experience developing customer relationships and delivering customer-focused service.
X		Proven problem-solving and decision-making skills, and the ability to uncover root cause and evaluate different solution options.
	X	Bachelor's degree in applied math, data science, computer science, statistics, or related field.
	X	Experience in data science, analytics, IT, cognitive engineering, or related fields.
	X	Demonstrated interest in data science and artificial intelligence, and experience in open domain (e.g., GitHub).
	X	Published writing on artificial intelligence and/or data science.
	X	Ability to write high-quality Python code.
	X	Familiarity with unit testing, source control and code review.

Other Job Factors

JOB ACCOUNTABILITIES

	% Time	Essential	Marginal	N/A
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.				

Other Requirements

Essential:	Emergency Response/Recovery	Essential:	Mandated Reporter
	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		A mandated reporter who in his or her professional capacity has knowledge of, or reasonably suspects a person who is under the age of 18 years, elderly, or a dependent adult has been the victim of abuse

Other Requirements

Essential:	Emergency Response/Recovery	Essential:	Mandated Reporter
	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.		or neglect must report the suspected incident. The reporter must contact a designated agency immediately or as soon as practically possible by telephone or in writing within 36 hours. By virtue of the associated job duties, this position qualifies as a mandated reporter as required by state law and USC's policy at: https://policy.usc.edu/mandated-reporters/

Campus Security Authority (CSA)		Essential:
By virtue of the associated job duties, this position qualifies as a Campus Security Authority as required by law and USC's policy at: https://dps.usc.edu/alerts/clery/		

ACKNOWLEDGMENTS

The above statements reflect the essential and non-essential functions as necessary to describe the principle contents of the job. They are not intended to be a complete statement of all work requirements or duties that may be required of the position. I understand that I may be asked to perform other duties as assigned. USC reserves the right to add or change duties at any time.

The University of Southern California is an Equal Opportunity Employer. USC prohibits discrimination on any basis protected under federal, state, or local law, regulation, or ordinance or university policies. All employment decisions are based on individual qualifications and business need.

I acknowledge receipt of this job description and its associated physical requirements. I have read and understand the job description and job requirements and agree to abide by their contents. I realize that duties may be requested of me that are not specifically stated herein. I understand that I will be expected to adjust to potential fluctuations in work volume. I understand that, if I have any questions about the essential functions or expectations of my position, my supervisor and/or HR partner are available to discuss them with me.

_____   _____   _____

Print Employee Name   Signature   Date

_____   _____   _____

Print Manager Name   Signature   Date

This job description describes the general nature and level of work required by the position. It is not intended to be an all-inclusive list of qualifications, skills,
duties, responsibilities or working conditions of the job. The job description is subject to change with or without notice, and Management reserves the right to add, modify or remove any qualification or duty. Nothing in this job description changes the existing at-will employment relationship between the university and the employee occupying the position.