



Duty Statement

DIRECTORATE/DIVISION	CLASSIFICATION	POSITION NUMBER (Agency-Unit-Class-Serial)
Data Analytics Division	Limited Term Research Data Specialist I	681-400-5742-XXX
BRANCH (if applicable)	WORKING TITLE	CBID
	Research Data Specialist	R01
SECTION/UNIT (if applicable)	REPORTING LOCATION	INCUMBENT
Development Unit	Statewide	Vacant
IMMEDIATE SUPERVISOR		
Research Data Supervisor II		
MISSION STATEMENT		
The mission of the Office of Energy Infrastructure Safety (Energy Safety) is to create a safer, sustainable California with utility infrastructure that is managed to reduce excavation and wildfire risk and is adaptable to an evolving climate.		
POSITION DESCRIPTION		
Under the general direction of the Research Data Supervisor II, Data Analytics Division, the incumbent will independently process, perform quality assurance and quality control (QA/QC) checks, and ingest data from utility data submissions into a database structure. The Data Specialist will work under general direction to integrate geographic, demographic, utility infrastructure, and other data in analyses of utility applications associated with wildfire mitigation and underground infrastructure. The data specialist will also work under general direction to develop and maintain pipelines for sharing and analyzing the data, and present findings to Energy Safety management and stakeholders. The Data Specialist will also work under general direction on providing recommendations on data collection processes, data quality, and other data evaluation analysis to Energy Safety.		
In all job functions, employees are responsible for creating an inclusive, safe, and secure work environment that values diverse cultures, perspectives and experiences, and is free from discrimination. Employees are expected to provide all members of the public equitable services and treatment, collaborate with underserved communities and tribal governments, and work toward improving outcomes for all Californians.		
ESSENTIAL FUNCTIONS:		
%	TASK/DUTIES	
40%	Gather, integrate and maintain data to conduct geographic spatial and statistical analysis on utility infrastructure safety; perform QA/QC steps using SQL and Python; measure and verify program outcomes in several areas including utility impacts such as compliance, threat, infrastructure, environmental and demographic information, plans, and the overall performance of utility activities with Dynamics, Powerapps, ArcGIS Pro, ArcGIS Online, PowerBI, Tableau, and other data analytic tools. Coordinate, conduct and assess underground safety, including the development of research questions, statistical methods/procedures, data analyses and conclusions.	
30%	Work with senior staff and other divisions at Energy Safety to facilitate nonspecialist access to data and analysis and provide assistance with interpretation and visualization of the data. Perform statistical, geographic, and longitudinal studies of utility risk mitigation implementation, effectiveness, and scope. Identify and evaluate structured and unstructured data to forecast trends and assess potential impact in areas where changes are being implemented and a body of knowledge of experience does not exist. Assess impacts resulting from changes in data values and/or planning assumptions.	
20%	Design research projects or activities (both quantitative and qualitative) in the areas of regulatory effectiveness, underground safety, and field operations performance and process improvement; solicit, collect, and analyze stakeholder input; identify and evaluate options for policy development and implementation (and their associated resource needs and constraints); and	



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	consult with Division and executive staff/management on information and data obtained from the research and analysis and technical application of data analysis. Plan, design and implement complex data processing steps and/or custom data analyses that support the Division's business objectives by modeling and scripting. Develop complex queries against utility systems utilizing tools, including Esri, Microsoft SQL Server, and other commercial data analysis platforms. Develop sensitive reports related to research findings. Present research results to senior department management, executive management, legislators, the public and other external stakeholders.
5%	Support other staff in developing data requests to utilities and responding to Public Records Act requests to obtain appropriate information.
MARGINAL FUNCTIONS:	
%	TASK/DUTIES
5%	Other job-related duties as assigned and necessary for operational continuity. Attend staff meetings and prepare administrative paperwork to meet operational needs. Participate in professional development trainings, as well as tasks, trainings and activities that support programmatic and workplace diversity, equity, and inclusion.
TYPICAL WORKING CONDITIONS	
Work Schedule: Monday through Friday, 8:00 am – 5:00 pm, 40 hours per week.	
TRAVEL REQUIREMENTS:	
May be required to travel to Sacramento up to 5% of the time, as needed.	
DRIVING REQUIREMENTS: No	
N/A	
TELEWORK DESIGNATION:	
Energy Safety utilizes a Hybrid Remote/In-person approach enabling staff to telework, when approved by management. Energy Safety will use shared workspaces for most staff (hoteling stations) when required to work in the office. This position is designated as telework eligible office-centered.	
CONFLICT OF INTEREST: ☐ YES ☒ NO	
N/A	
SPECIAL REQUIREMENTS:	
KNOWLEDGE AND ABILITIES <i>[From Class Specs]</i>	
Knowledge of:	
- Data analysis methods and techniques including gathering, collection, and storage of structured and unstructured data, as well as general principles, concepts and terminology used in research; planning studies and investigations; trend analysis procedures; time management techniques to provide for efficient prioritization and completion of projects and assignments; software to prepare spreadsheet summaries, reports, charts, and tables; basic statistical techniques to analyze numerical data; and departmental policies and procedures. - Design and implement research-related projects; practices required to ensure and maintain data security, including securely transmitting confidential data; experimental design procedures; problem-solving techniques and processes to identify and resolve issues related to the completion of work assignments; and advanced mathematical techniques and descriptive statistical analysis techniques and methods.	



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- Principles and concepts applied in research and statistical settings; principles and concepts appropriate to data and research techniques and methodologies; operations research methods; current data analytics processes, including the utilization of business intelligence software programs; broad principles of algorithms, data structures, and data management; application of computerized models to research data, statistical and other methods used in the analysis; survey methods and analytical techniques; organizational analysis including data presentation and interpretation; principles and procedures of forecasting, and of research planning, design, methodology; problem solving techniques and processes to facilitate the identification and resolution of issues related to the completion of work assignments.
- State, federal and departmental regulations; benefit-cost analysis; complex database design and structure to understand and complete research projects and assignments; and project management principles in order to design projects (e.g., define schedules, tasks, milestones, deliverables).

Ability to:

- Research, gather, compile, and analyze structured and unstructured data; analyze written and numerical data regarding general governmental problems; speak and write effectively; develop and evaluate alternatives, recommendations, solutions, and conclusions or approaches to research problems; manage a workload consisting of multiple projects and assignments; complete work under critical timelines to meet project objectives and deadlines; be objective and flexible to adapt to changes in priorities and work assignments; and gain and maintain the confidence and cooperation of others, collaborate, and work in multidisciplinary teams.
- All of the above and query, mine, analyze, and manipulate data; communicate effectively both orally and in writing to individuals and groups related to the area of research; present ideas and information effectively; adapt and apply formal research methods and principles to research problems; design and validate studies and analyze the accuracy of data collected; analyze quantitative and qualitative data to reach sound conclusions and/or make recommendations; identify improvements and originate and develop new solutions which depart from traditional and existing patterns; consult with and advise administrators or other interested parties on a wide variety of subject-matter areas; recognize when issues, activities, and/or decisions need to be elevated to management, and communicate information effectively to others.
- Plan and carry out research and data projects; prepare and present reports and data models; adapt and apply complex research methods and principles to research problems of an applied practical nature; identify required data, information, materials, and resources needed to complete/perform a project; identify data needs of complex analyses and evaluate adequacy of existing data to meet these needs; develop procedures for collection and integration of data sources; design and test complex database structures for storage and manipulation; access and process data located on large databases, servers, mainframes and/or desktop computers; design and conduct data validation studies; conduct program evaluation studies including the systematic analysis of program requirements, goals, and outcomes to ensure program effectiveness; analyze and evaluate the impact of programs, procedures, business processes, and/or policies; develop documents related to data processing and analysis procedures for research projects and assignments to be used as a future resource; determine how a system or process works and how utilizing new inputs, operations, and environmental conditions would affect outcomes; provide technical assistance to professional personnel; establish and maintain cooperative relationships with others, and with stakeholders; communicate with internal and external stakeholders with diplomacy and tact, especially concerning difficult and sensitive issues.
- Translate legislatively mandated program tracking and evaluation requirements into methodically rigorous data collection; translate departmental policy into action programs and/or test the impact of policy changes; evaluate the adequacy and merit of proposed research and evaluation study designs and techniques; provide expert consultation on the feasibility impact or potential of a variety of operations, projects or proposals to the



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department and to other organizations; analyze and evaluate the impact of changes to existing programs, procedures, business processes, and/or policies; write clear and concise studies and reports; design and develop research methodologies required to ensure the collection and analysis of appropriate, meaningful, and unbiased data; conduct and interpret descriptive and/or inferential statistical analyses using appropriate software to test research hypotheses and to formulate conclusions and recommendations; analyze situations accurately and take effective action at the appropriate time; and provide mentoring to staff.

WORK ENVIRONMENT, PHYSICAL OR MENTAL ABILITIES:

- Proficiency with communications-related technologies, including personal computer applications, telecommunications equipment, Internet, voicemail, email, etc.
- Dress appropriately for a business/government environment.
- Must maintain regular and acceptable attendance at such level as is determined at the Department's sole discretion.
- Occasional travel required that may include evenings, weekends, overnight or several days at a time.
- Must be regularly available and willing to work the hours the Department determines are necessary or desirable to meet its business need.

CONDUCT, ATTENDANCE AND PERFORMANCE EXPECTATIONS:

- Maintain consistent attendance.
- Demonstrate punctuality, initiative, and dependability.
- Exercise and model poise and resourcefulness in overcoming challenges and obstacles and diplomacy and mutual respect in resolving conflicts with others.
- Practice, model and advance good teamwork, collaboration, and accountability, and maintain the confidence and cooperation of others.
- Advance and contribute to continuous improvement and a positive, high performing work environment.

PHYSICAL AND ENVIRONMENTAL DESIGNATION: Office

Work in a climate-controlled, high-rise building, open office environment, under artificial lighting; exposure to computer screens and other basic office equipment; work in a professional environment, under deadlines. There will be occasional fluctuations in temperature. The employee will work in a cubicle and will periodically attend meetings and/or training outside of his/her assigned office.

ESSENTIAL PHYSICAL CHARACTERISTICS

Note: Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such reasonable accommodations.

Activity	Frequency	Distance/Height
Sitting	Constantly (Over 6 Hours)	
Standing	Occasionally (Up to 3 Hours)	
Running	Never	
Walking	Never	
Crawling	Never	
Kneeling	Never	
Climbing	Never	



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Squatting	Never	
Bending (neck)	Constantly (Over 6 Hours)	
Bending (waist)	Occasionally (Up to 3 Hours)	
Twisting (neck)	Constantly (Over 6 Hours)	
Twisting (waist)	Occasionally (Up to 3 Hours)	
Reaching (above shoulder)	Occasionally (Up to 3 Hours)	
Reaching (below shoulder)	Occasionally (Up to 3 Hours)	
Pushing & Pulling	Never	
Fine Manipulation	Constantly (Over 6 Hours)	
Power Grasping	Never	
Simple Grasping	Constantly (Over 6 Hours)	
Repetitive use of hand(s)	Constantly (Over 6 Hours)	
Keyboard Use	Constantly (Over 6 Hours)	
Mouse Use	Constantly (Over 6 Hours)	
Walking on uneven ground	Never	
Driving	Occasionally (Up to 3 Hours)	
Lifting/Carrying	Occasionally (Up to 3 Hours)	
0 – 10 lbs.	Occasionally (Up to 3 Hours)	
11 – 25 lbs.	Never	
26 – 50 lbs.	Never	
51 – 75 lbs.	Never	
76 – 100 lbs.	Never	
100 + lbs.	Never	

The statements contained in this job description reflect general details as necessary to describe the principal functions of this job. It should not be considered an all-inclusive listing of work requirements. The incumbent of this position may perform other duties (commensurate with the classification) as assigned, including work in other functional areas to cover during absences, to equalize peak work periods, or to otherwise balance the workload.

SUPERVISOR STATEMENT:

I CERTIFY THIS DUTY STATEMENT REPRESENTS AN ACCURATE DESCRIPTION OF THE ESSENTIAL FUNCTIONS OF THIS POSITION. I HAVE DISCUSSED THE DUTIES OF THIS POSITION WITH THE EMPLOYEE AND PROVIDED THE EMPLOYEE WITH A COPY OF THIS DUTY STATEMENT.

SUPERVISOR NAME (TYPE)

SUPERVISOR SIGNATURE

DATE

EMPLOYEE STATEMENT:

I CERTIFY I HAVE READ, UNDERSTAND, AND CAN PERFORM THE DUTIES OF THIS POSITION EITHER WITH OR WITHOUT REASONABLE ACCOMMODATION. I HAVE DISCUSSED THESE DUTIES WITH MY SUPERVISOR AND HAVE BEEN PROVIDED A COPY OF THIS DUTY STATEMENT.



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EMPLOYEE NAME (TYPE)	EMPLOYEE SIGNATURE	DATE