

State of California
GOVERNOR'S OFFICE OF EMERGENCY SERVICES
POSITION DUTY STATEMENT
BU: 2, 7, & Non-represented

EMPLOYEE	CLASS TITLE: Information Technology Specialist III	HEADQUARTERS: Mather Campus
PROGRAM/UNIT: Information Technology Data and Geospatial Unit	POSITION NUMBER: 778-1415-xxx	CBID: M01
TENURE: Permanent	TIME BASE: Full Time	WORK WEEK GROUP: E
APPT. EFFECTIVE DATE:	RANGE (IF APPLICABLE):	PROBATIONARY PERIOD: <input type="checkbox"/> 6 Mos. <input checked="" type="checkbox"/> 12 Mos. <input type="checkbox"/> N/A
IMMEDIATE SUPERVISOR:	CONFLICT OF INTEREST CATEGORY: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	DMV PULL PROGRAM: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

1. SUPERVISION RECEIVED:
The Information Technology Specialist III (ITS III), Geospatial Data Scientist is under the administrative direction of the Information Technology Manager II, Data and Geospatial Unit.
2. SUPERVISION EXERCISED:
N/A
3. PHYSICAL DEMANDS (SEE ADDITIONAL PAGES):
Physical tasks include sitting for extended periods at a computer workstation in an office setting with artificial light and temperature control. The incumbent will work a minimum of 40 hours per week, with the possibility of overtime in the event of an emergency. Ability to use a personal computer and telephone is essential; as the majority of the work is performed in utilizing these tools. Travel in automobile, commercial aircraft and public transportation. Must be able to lift computer equipment and related items that weight up to 50 pounds.
4. PERSONAL CONTACT (WHO THE EMPLOYEE MAY BE IN CONTACT WITH WHILE PERFORMING DUTIES):
Incumbent will have direct contact with department managers and supervisors, employees of Cal OES, other state agencies, and the federal government relating to the evaluation of the data and geospatial services within Cal OES and during emergency operations. This position may act as a liaison with outside contractors and vendors who are providing goods or services to Cal OES. Direct contact with the Department of Technology to report on regular status and IT reporting requirements.
5. ACTIONS AND CONSEQUENCES (AS RELATED TO DUTIES PERFORMED):
The California Governor's Office of Emergency Services (Cal OES) is responsible for disaster response, planning, preparedness and training. This position holds a high-level responsibility for the security and integrity of publically displayed information. Failure to effectively perform the duties of the position could result in loss of critical information for the mission and the organization.
6. EMERGENCY OPERATIONS – ACTIVATION/OPERATIONAL ASSIGNMENT 100%:
When requested to fill an operational assignment and until demobilized, the following duties will be performed, and your regular duties may temporarily cease:

May be required to work in the State Operations Center (SOC), Region Emergency Operations Center (REOC), Joint Field Office (JFO), Area Field Office (AFO), Local Assistance Center (LAC), or other location to provide assistance in emergency response and recovery activities. All staff is required to complete operational related training and participate in one of three Readiness Teams that rotate activation availability on a monthly basis if not assigned to an Operational Branch (e.g., Fire/Law/Region). May be required to participate in emergency drills, training and exercises.

Staff need to work effectively under stressful conditions; work effectively & cooperatively under the pressure of short leave time; work weekends, holidays, extended and rotating shifts (day/night). Statewide travel may also be required for extended periods of time and on short notice.

(CONTINUED) EMERGENCY OPERATIONS – ACTIVATION/OPERATIONAL ASSIGNMENT 100%:

While fulfilling an operational assignment it is important to understand that you are filling a specific "position" and that position reports to a specific Incident Command System (ICS) hierarchy. This is the chain of command that you report to while on this interim assignment.

On Call/Standby/Duty Officer (if applicable)

If assigned on-call, standby or as a Duty Officer, you are required to be ready and able to respond immediately to any contact by Cal OES Management (including contact from the State of California Warning Center) and report to work in a fit and able condition if necessary as requested.

7. JOB DESCRIPTION/GENERAL STATEMENT:

The ITS III, Geospatial Data Scientist develops and applies methods to identify, collect, process, and analyze large volumes of data to build and enhance products, processes, and systems for emergency management. The incumbent will work in a dynamic environment to deliver interoperable Department solutions. The Geospatial Data Scientist will conduct data mining and retrieval, and apply statistical and mathematical analyses to identify trends, solve analytical problems, develop predictive models, and create visualizations that anyone can use. The Geospatial Data Scientist will apply the application of programing, statistics and visualization to glean insights from large and disparate data sources.

The incumbent requires expert-level knowledge and hands-on experience in data science. Performing in a leadership role on the Data and Geospatial team, the incumbent will work with architects, engineers, and GIS analysts to deliver complex algorithms, explanatory and predictive models, and visualizations to assist in disaster preparedness, response, and recovery. The incumbent will initiate, build and maintain professional relationships with internal and external Cal OES partners to collaborate on providing quality solutions.

Percent of Time	ESSENTIAL FUNCTIONS
35%	(E) PLANNING AND DESIGN As a strategic problem solver, the ITS III, Geospatial Data Scientist will understand the unique needs of Cal OES programs and equip them with an understanding of their data, including trends and insights to help them plan, respond to, and recover from disasters. The ITS III will define and execute a data science strategy and roadmap to achieve program objectives. In collaboration with program staff, the incumbent will build predictive models to inform Cal OES's strategy for emergency management. Serving as a technical expert in data modeling techniques, the ITS III will apply complex data modeling theories and techniques to support projects, and will oversee the data analysis and visualization activities of GIS analysts and developers on their projects. This position requires effective communication to all levels of the Department, and externally with other State departments and organizations.
35%	(E) APPLIED PROGRAMMING The ITS III Geospatial Data Scientist will apply programming and/or manipulation of data with programming languages such as Python, R, and SQL. The incumbent will develop and deploy automated processes to identify, collect, process, and analyze large data sets. Data visualizations for exploratory comparative analysis using scripts, algorithms, and predictive models will be created. Analytic techniques such as classification, regression, similarity matching, clustering, co-occurrence grouping, link prediction, data reduction and causal modeling will be applied. Visualization techniques and software tools such as Tableau will be used.
25%	(E) TRAINING AND CONSULTATION The ITS III Geospatial Data Scientist will communicate technically complex methods and solutions to non-technical audiences verbally and in writing. The incumbent will consult with program staff to ensure their analytics are statistically sound. Advice and guidance will be provided on the correct use of methodology, including obtaining or generating the necessary input information, understanding and meeting the assumption associated with a specific application, and properly interpreting the results.

Percent of Time	MARGINAL FUNCTIONS				
5%	(M) Other related duties as assigned. Will participate in training exercises and emergency response activities of State, regional and local Emergency Operations Centers; and performing other duties that are necessary and essential to support Cal OES IT programs. Travel throughout the State could be required during disaster events in California.				
PHYSICAL AND MENTAL REQUIREMENTS OF ESSENTIAL FUNCTIONS					
Activity	Not Required	Less than 25%	25% to 49%	50% to 74%	75% or More
VISION: Reviewing mail; preparing various forms; proofreading documents; reading printed material, computer screens, and handwritten materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
HEARING: Answering telephones; receiving verbal information from outside sources; understanding verbal instruction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
SPEAKING: Receiving visitors; answering inquiries and providing verbal information or instruction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MOVEMENT: Delivering material to others; picking up materials from others; copying; faxing; distributing information; filing.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SITTING: At a computer terminal or desk; conferring with employees.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
STANDING:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BALANCING:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CONCENTRATING: Reviews and reads records/documents, researches, composes, analyzes, compiles, and updates technical documents; multi-tasking; prepares various forms and documents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COMPREHENSION: Understanding needs of co-workers, clients; understands procedures and practices; Understands laws, regulations related to their work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WORKING INDEPENDENTLY: Possesses ability to work independently as well as a team member, have good interpersonal and communication skills, ability to follow directions, take initiative, assume responsibility, and exercise good judgment and tact. Must be able to work alone without much guidance or interaction or interaction from other staff.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

PHYSICAL AND MENTAL REQUIREMENTS OF ESSENTIAL FUNCTIONS					
Activity	Not Required	Less than 25%	25% to 49%	50% to 74%	75% or More
LIFTING UP TO 10 LBS. OCCASIONALLY:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LIFTING UP TO 20 LBS. OCCASIONALLY AND/OR 10 LBS. FREQUENTLY:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LIFTING UP TO 20-50 LBS. OCCASIONALLY AND/OR 25-50 LBS. FREQUENTLY:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FINGERING: Pushing buttons on telephone; typing; copying.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
REACHING: Answering phones.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CARRYING: Distributing mail; reports; stocking supplies.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLIMBING: stairs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BENDING AT WAIST:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
KNEELING:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PUSHING OR PULLING:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HANDLING: Documents, manuals	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DRIVING:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OPERATING EQUIPMENT: Computer; telephone; copy machine; fax.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WORKING INDOORS:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WORKING OUTDOORS:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WORKING IN CONFINED SPACE: Enclosed office environment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

OTHER INFORMATION

Must have knowledge of the state and related federal laws, rules, regulations, policies and procedures. Must exercise good writing skills; follow oral and written directions, be responsive to the needs of the public and employees of Cal OES and other agencies; analyze situations and take effective action using initiative, resourcefulness, and good judgment. May need to work with limited supervision.

Consistent with good customer service practices and the goals of the Cal OES Strategic Plan, the incumbent is expected to be courteous and provide timely responses to internal and external customers, follow through on commitments, and solicit and consider internal and external customer input when completing work assignments.

SIGNATURES

Certification of Applicant/Employee

Note – If any concerns with performing the duties of this position with or without reasonable accommodation, discuss your concerns with the hiring supervisor, who in turn, will discuss with the Reasonable Accommodation Coordinator.

I certify that I possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties as described above with or without reasonable accommodation.

I have read and discussed these duties with my supervisor:

Employee's Signature

Date

I certify that the above accurately represents the duties of the position:

Supervisor's Signature

Date

Civil Service Title