

**DUTY STATEMENT**

TECH 052 (REV. 02/2018)

**PROPOSED**

**RPA NUMBER (HR USE ONLY)**

24-061

**ALERT: This form is mandatory for all Requests for Personnel Action (RPA).**

**INSTRUCTIONS:** Before completing this form, read the instructions located on last page.

**Section A: Position Profile**

A. DATE 10/9/24	B. APPOINTMENT EFFECTIVE DATE	C. INCUMBENT NAME Vacant
D. CIVIL SERVICE CLASSIFICATION Information Technology Specialist II		E. POSITION WORKING TITLE Geospatial Engineer II, Middle-Mile Broadband Initiative
F. CURRENT POSITION NUMBER 695-952-1414-003		G. PROPOSED POSITION NUMBER (Last three (3) digits assigned by HR)
H. OFFICE / SECTION / UNIT / PHYSICAL LOCATION OF POSITION Office of Digital Services/Data & Geospatial Services/MMBI Data & GIS Services		I. SUPERVISOR NAME AND CLASSIFICATION Louie Rowley, Information Technology Manager I, Middle-Mile Broadband Initiative
J. WORK DAYS / WORK HOURS / WORK SHIFT (DAY, SWING, GRAVE) MONDAY – FRIDAY, 8:00 AM – 5:00 PM		K. POSITION REQUIRES: FINGERPRINT BACKGROUND CHECK <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO DRIVING AN AUTOMOBILE <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

**Section B: Position Functions and Duties**

Identify the major functions and associated duties, and the percentage of time spent annually on each (list higher percentages first).

	<p><b>Information Technology Domains</b> (Select all domains applicable to the incumbent's duties/tasks.)</p> <p><input type="checkbox"/> Business Technology Management      <input type="checkbox"/> IT Project Management      <input type="checkbox"/> Client Services</p> <p><input type="checkbox"/> Information Security Engineering      <input checked="" type="checkbox"/> Software Engineering      <input type="checkbox"/> System Engineering</p>
	<p><b>Organizational Setting and Major Functions</b></p> <p>Under the general direction of the Information Technology Manager I (IT Mgr I) over the Middle-Mile Broadband Initiative (MMBI) Data and Geospatial Information Systems (GIS) Services, the Geospatial Engineer II, Information Technology Specialist II (IT Spec II), works at a highly skilled level involving complex technology, a subsystem of business applications or work on integration projects, and typically requires an unusual depth of understanding in a singular technology or a good understanding of multiple technologies. The IT Spec II works directly with other MMBI staff and management, including staff of other agencies and departments. The IT Spec II will also lead other teams of Information Technology (IT) professionals as needed.</p> <p>The work environment often operates at a fast pace where demands require managing multiple high priorities simultaneously, each with tight deadlines. The nature of the work also requires the IT Spec II to be adaptable to new technologies and trends in IT and learn new skills to keep current.</p>
<p>% of time performing duties</p> <p>60%</p>	<p><b>Essential Functions</b> (Percentages shall be in increments of 5, and should be no less than 5%.)</p> <p><b>Geospatial Information Systems (GIS) and Data Services:</b></p> <ul style="list-style-type: none"> <li>• Aggregate, maintain, develop and edit geospatial datasets and repositories.</li> <li>• Ensure integrity, accuracy, reliability, and security for GIS applications systems.</li> <li>• Design, develop, and maintain GIS application software to support business process automation.</li> <li>• Create and maintain web map applications published via ArcGIS.</li> <li>• Coordinate with the MMBI QA/QC ITS to clarify and remediate any data discrepancy between MMBI Data Warehouse Data with Partner(s).</li> <li>• Oversee design and maintenance of accepted GIS operating standards.</li> <li>• Act as subject matter expert in the development of policies for GIS.</li> <li>• Coordinate with and between MMBI partners to ensure and enforce GIS data best practices.</li> <li>• Oversee and interface with data and GIS vendors to provide vendors direction and alignment around GIS and data standards.</li> <li>• Work directly with MMBI Senior Telecommunications Engineer to interpret and model data infrastructure that accurately depicts MMBI's physical infrastructure.</li> </ul>

% of time performing duties

35%

### **Web Application, GIS:**

- Provide software development in support of MMBI's customer web applications, services, content management systems, and projects.
- Design data analytics solutions based on business requirements, service offering, programming development, standard templates, Software Development Life Cycle (SDLC) methodologies, and APIs.
- Support the extractions, transformations, and loadings (ETL) of internal and external datasets/files.
- Provide data analysis and data analytics expertise in support of MMBI Services and statewide web solutions development.
- Integrate data from various back-end services and databases.
- Build wireframe mockups and site process flow.
- Facilitate regular data review with peers to adhere to standards and maximize reuse.
- Gather and refine specifications and requirements based on both business and technical needs.
- Develop and maintain documentation for assigned web services and technologies.
- Plan, schedule, and coordinate projects for external and internal customer web development/and data analytics projects.
- Recommend the best technologies and approach for a technical solution in accordance with CDT's strategic plan and emerging technologies/industry trends.

5%

### **Marginal Functions** (Percentages shall be in increments of 5, and should be no more than 5%.)

Marginal functions include:

- Attend formal and informal training as directed by management.
- Attend and actively participate in meetings as required by management.
- Other related duties as needed.

### **Work Environment Requirements**

- During state emergencies or activation by the California Office of Emergency Services, incumbents may be asked to work extended hours, 12-hour shifts, and/or off site and occasionally out of town.
- May occasionally be required to work some weekends.
- May occasionally be required to work outside of normal business hours.
- May be required to carry and use a cell phone or mobile device.
- May occasionally be required to travel between Rancho Cordova and Sacramento.

### **Allocation Factors** (Complete each of the following factors.)

#### **Supervision Received:**

The IT Spec II receives general direction from the IT Mgr I. Assignments will be general in nature, accompanied by any special constraints or requirements. Progress will be reported using periodic status reports.

#### **Actions and Consequences:**

The IT Spec II's work product is a direct representation of CDT's programs and service delivery, as well as the Governor's Office's initiatives to improve transparency in government. Accuracy and professionalism in the delivery of web content to the public is paramount in order to improve and sustain the communications activities and mandatory reporting processes for these critical programs. The IT Spec II must possess expert knowledge in order to make decisions and recommendations. Poor decisions or recommendations have statewide implications and could result in significant disclosure or loss of confidential material, and the interruption of essential communication services.

#### **Personal Contacts:**

The IT Spec II provides leadership within CDT, and by extension, all of State service. The IT Spec II advises and consults with CDT management and executives from public and private organizations, legislators, and others working to make government information and services available via web technologies. The IT Spec II must also work cooperatively and professionally

with a variety of vendors who may be utilized to develop specific reporting systems for use by these web sites.

**Administrative and Supervisory Responsibilities:**(Indicate "None" if this is a non-supervisory position.)  
None.

**Supervision Exercised:**  
None.

**Other Information**

**Desirable Qualifications:** (List in order of importance.)

- Knowledge of geospatial theory and analytical techniques.
- Knowledge of utilities geospatial data, design, and workflows.
- Knowledge of GIS for infrastructure construction and maintenance.
- Toolkit: ESRI ArcGIS Desktop (Pro) and ArcGIS Online, GitHub, MySQL, QGIS, MSSQL geospatial
- APIs: Python for ArcGIS, Arcpy, REST, SOAP, ASP.NET Web API, ArcGIS Server.
- Languages/tools: Python, JSON, HTML, CSS, JavaScript, SQL, XML, C#, VB.Net, IIS, SQL reporting services.
- Frameworks: ESRI Python for ArcGIS, ESRI Arcpy, ESRI JavaScript, jQuery, various mobile and accessibility platforms and standards, ASP.NET MVC, WordPress.
- Databases: Snowflake, PostgreSQL, Redshift, MS SQL Server, MySQL, ESRI file, personal, and enterprise geodatabases.
- Server technologies: PostGIS, IIS, MS SQL Server, MySQL, ArcGIS Server, FME Server, ArcGIS Online Service Offerings, ESRI Geoportal, ESRI ArcGIS Hub.
- FME Work Bench (extract transform and load), FME Server ME Server.
- Ability to work independently and collaboratively and manage multiple priorities while working in a fast-paced, highly visible environment.
- Possess excellent communication skills.
- Ability to effectively interact with executive level management, and technical staff including the Governor's Office (GO), state webmasters, vendors, and end users.
- Provide timely and quality delivery of enterprise web content services and solutions to the GO, CDT, Office of Technology and program staff and managers.
- Ability to take independent actions and be knowledgeable of CDT's policies and procedures.

**INCUMBENT STATEMENT: I have discussed the duties of this position with my supervisor and have received a copy of the duty statement.**

INCUMBENT NAME (PRINT)	INCUMBENT SIGNATURE	DATE
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**SUPERVISOR STATEMENT: I have discussed the duties of this position with the incumbent.**

SUPERVISOR NAME (PRINT)	SUPERVISOR SIGNATURE	DATE
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