

JOB OPENING ANNOUNCEMENT

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Employment Hotline (650) 508-6308

January 3, 2020

TITLE: Senior Engineer III (Positive Train Control)
EMPLOYMENT TYPE: Exempt
DIVISION: Rail
APPLICATION DEADLINE: **Open Until Filled (1st resume review will be January 24, 2020)**
PAY RANGE: \$1,913 - \$2,870 per week (\$99,511 to \$149,267 est. annual)
WORK LOCATION: 1250 San Carlos Avenue, San Carlos, California
WORK SCHEDULE: Full Time

Job Summary: The Senior Engineer III (Positive Train Control) will report to the Deputy Director, Railroad Systems Engineering and will be responsible for developing, implementing, and maintaining the Positive Train Control (PTC) system and will be experienced in Railroad Systems with a working knowledge of Train Control, Wayside Signals, On-Board Systems and FRA regulations pertinent to railroad operations as well as systems interoperability for the Peninsula Corridor Joint Powers Board (Caltrain).

Examples of Essential Functions:

- Implement and maintain the Interoperable Electronic Train Management System (IETMS) (PTC) systems, including back office server (BOS), Network Management System (NMS), Interoperable Train Control Message Server (ITCMS); Wayside Status Relay Service (WSRS), and its interface to the Rail Operations Control System (ROCS) Computer Aided Dispatching System, Predictive Arrival and Departure System (PADs), Radio Dispatching System (RDS) and future systems including Supervisory Control and Data Acquisition (SCADA).
- Perform as a key member for Caltrain Configuration Management Change Control Committee and ensure all PTC system related hardware, software, PTC data will follow Caltrain Configuration Management process and procedure
- Ensure Caltrain train control systems are functioning for optimal performance and in accordance with FRA mandated requirements for all tenant railroads interoperability.
- Provide general technical oversight of PTC System and perform system usage and performance analyses.
- Act as liaison on matters related to Interoperable Train Control (ITC) requirements with internal and external stakeholders and agencies such as: California Public Utilities Commission (CPUC), the Federal Railroad Administration (FRA), Union Pacific Railroad, ITC Standard Committees, American Public Transportation Association (APTA) and other interested parties as required.
- Manage train control engineering projects.
- Develop and maintain train control engineering standards, requirement specification and technical procedures.
- Ensure Caltrain PTC monthly report to the FRA complies with the regulation reporting requirements; inform FRA regarding I-ETMS Changes.

Examples of Duties:

- Manage the PTC systems' warranty and long-term maintenance support service agreements.
- Monitor operating and technical contractors on PTC to ensure system meets the mandated requirements.
- Identify and resolve PTC issues and review project schedules, assist in strategic planning, prepare status reports, coordinate project resources, and communicate with all project participants on relevant issues.
- Ensure Caltrain PTC system is compatible with Association of American Railroad (AAR) standards and follow the International Test Commission (ITC) guidelines including "N-2" backwards compatible software versions.
- Review PTC operating manuals and procedures developed by various system providers or vendors.
- Manage all PTC technology refresh and software upgrades/updates and associated testing without impacting with railroad daily service and Operations.
- Coordinate with UPRR and other tenant railroads and address on-going interoperability issues if is needed
- Develop test procedures and test plans; conduct and verify system tests, conduct on-site technical reviews including independent verification and validation of system features and functionality
- Provide technical input to the Railroad on any changes that impacting PTC; manage lab and field regression testing as needed.

- Provide PTC technical input to develop project scopes.
- Perform design reviews for regulatory compliance and cost effectiveness.
- Perform all job duties and responsibilities in a safe manner to protect yourself, fellow employees, and the public from injury or harm. Promote safety awareness and follow safety procedures in an effort to reduce or eliminate accidents.
- Perform other duties as assigned.

Supervision: Works under the supervision of the Deputy Director, Railroad Systems Engineering, who establishes goals and objectives and evaluates performance.

Minimum Qualifications: Sufficient education, training and experience to demonstrate the knowledge and ability to successfully perform the essential functions of the position. Development of the required knowledge and abilities is typically obtained through but not limited to:

- Bachelor's degree in Electrical / Electronic Engineering, Computer Science or related field.
- Four years of professional railroad train control experience or related field.

Preferred Qualifications

- Experience with an emphasis on PTC and other train control systems' development and maintenance is desirable.
- Experience with supervisory train control, wayside signal, highway crossing warning system, predictive and arrival system, and traffic signal control is desirable.
- Experience with rail industry systems, electrical interfaces, software and network protocols, and system integration with commercial off the shelf (COTS) hardware and software is desirable.
- Must have effective oral and written communication skills.
- Possession or working toward a Professional Engineering license desirable.

Selection Process May Include:

Applications will be screened for completeness and minimum qualifications.

Written and/or skills assessment examination.

Finalists will be interviewed by a screening and selection panel.

Background investigation

Current Employment Benefits at SamTrans:

- Holidays: Seven paid holidays, plus up to five floating holidays per year
- Time Off: Paid Time Off: Up to 26 days per year
- Cafeteria Plans: Medical, dental, vision care, group life insurance, and more
- Transportation: Free bus transportation for employees and qualified dependents
- Retirement: Social Security and California Public Employees Retirement Systems (CalPERS)
 - Classic Members – 2% @ 60 benefit formula, 3 year average of highest compensation
 - New Members – 2% @ 62 benefit formula, 3 year average of highest compensation

How to Apply:

Although we encourage applicants to apply online, we are still accepting paper applications.

- Apply online or complete a SamTrans Employment Application per instructions printed on the application.
- When completing the online application, please follow instructions on the Prospective Employee Reference Guide found at www.smctd.com/jobs.html. When completing the paper application, please specify the position for which the application is being submitted.
- Incomplete or improperly completed online or paper applications may be rejected even if you are qualified for the position for which you are applying. It is your responsibility to ensure that the online or paper application reflects the work experience and education needed to meet the requirements for the position(s) for which you are applying.
- Your completed application package must be received by the District's Human Resources Department by the specified deadline to receive consideration. Paper applications must be received by the Human Resources Department by 4:30 pm on the application deadline date. Online applications must be submitted prior to midnight on the application deadline date.

The Human Resources Department will make reasonable efforts in the recruitment/examination process to accommodate applicants with disabilities upon request.

If you have a need for an accommodation, please call (650)508-6308.

SamTrans is an Equal Opportunity Employer.