

# Surendra K. Patel

Electrical Engineer  
surupatel738@gmail.com



## FIRM

Consultant to Soteria Company, LLC  
October 2013 - Present

## EDUCATION

B.S. Electrical Engineering (BSEE),  
Woolwich Polytechnic, London S. E.  
18, United Kingdom

## AREAS OF EXPERTISE

- Safety & Security Test Construction
- Electrical Engineering with a Design Focus
- Security Design Engineer
- Fiber Optics Security Design
- Surveillance Engineering & Design

## YEARS OF EXPERIENCE

10 Years

## REGISTRATIONS & CERTIFICATIONS

- Fiber/Optics, Laser & Modern Physics, Moorpark Technical Collage, CA, U.S.A.
- Facility Security Surveillance Design, Rockwell International, CA, U.S.A.
- Telecom, Instrumentation and Control Engineering, Croyden Technical Collage, London, U.K.

## EMPLOYMENT

- Consultant, Self-Employed  
2010 - Present
- Security Design Engineer  
Aegir Systems, Inc., Ventura, CA  
2002 – 2010
- Design Engineer - Security & Surveillance  
Consulting West, Thousand Oaks, CA  
2000 – 2002
- Project Design Engineer – Security & Surveillance  
Mark Systems, Inc., Moorpark, CA  
1997 - 1999

## TECHNICAL EXPERIENCE

Mr. Patel is an Electrical Engineer experienced in System Safety, Security, and Testing of critical systems and facilities. He has considerable experience in the Safety, Security and Testing of commuter rail systems, including passenger stations, layover facility yards, track and right of way at grade crossings, and has specific expertise in control of identified threats and vulnerabilities.

Surendra's background experience and areas of expertise includes:

- Test, Evaluation, and Systems Integration consisting of the state-of-the-art electronic technology for safety and security systems
- CCTV Surveillance
- Access Control & ID
- Intrusion Detection
- Duress Alarms
- Intercoms and Data systems

## SUMMARY OF EXPERIENCE

Mr. Patel's experience as a Safety and Security Specialist and Electrical Engineer includes:

- Construction Management support in Safety, Security and Testing for the Metrolink Perris Valley Commuter Rail Extension Project
- Electrical Engineering with Design experience specializing in Security Surveillance, Access & ID Systems, Instrumentation and control of Facility Systems
- Security Design Engineer in support of Port of Long Beach CCTV Surveillance Project
- Security/Safety Consultant for Port of Los Angeles Risk Assessment Project
- Security Design Engineer in support of Port of San Diego CCTV Surveillance Project
- Security Design Engineer for Foley Federal Building, Las Vegas CCTV Surveillance, Access Control Project
- Designed a CCTV Fiber-Optic Network System that interfaced Security/Communication of 8 facilities utilizing Main Control Stations

## RELEVANT AND RELATED EXPERIENCE WITH SOTERIA

**Redlands Passenger Rail Project, San Bernardino and Redlands, CA**  
October 2016 – Present

SBCTA's Redlands Passenger Rail Project (RPRP) will develop a rail transit system to connect the San Bernardino Transit Center (SBTC) and the University of Redlands. The system takes advantage of an existing but underutilized railroad line originally constructed in 1888 by the Santa Fe Railway. The current service model proposed is a frequent-headway diesel multiple unit (HCV) commuter service operating between San Bernardino and Redlands, augmented by a limited number of Metrolink conventional express trains providing access to its region-wide network. As part of the Construction Management team, Soteria is providing safety and security planning, analysis and certification services, and is leading the safety and security program for the design and construction phases of the project.

**Mr. Patel's Role:** Safety & Security Specialist, Electrical Engineer

Responsibilities: Reviewed and expanded the verification evidence for the Design Criteria Conformance Checklists to support the Safety and Security Certification Program. The checklists reviewed included Communications, Railroad Signals, Grade Crossings, Positive Train Control, Stations, and Bridge Structures.

## **Perris Valley Line Commuter Rail Extension, Riverside, CA**

October 2013 – June 2016

Soteria Company, LLC managed the System Safety and Security Certification Program for this extension to continue rail service 24 miles from the Downtown Riverside Station, with associated construction and rehabilitation of existing tracks and crossings. Soteria ensured the project met FRA and FTA requirements, led the startup and commissioning phase, and provided technical expertise for integrated testing.

Soteria managed the System Safety and Security Program, ensuring it met FRA and FTA requirements. Soteria also led the startup and commissioning phase and provided technical expertise for integrated testing.

**Mr. Patel's Role:** Safety & Security Specialist, Electrical Engineer

Responsibilities: Provided technical support for the PVL Safety and Security Certification Program. Reviewed the verification evidence for the Design Criteria and Construction Conformance Checklists for Track, Stations, Layover Facility & Yard, Grade Crossings and Signaling.

## **ADDITIONAL RELEVANT AND RELATED EXPERIENCE**

### **Port of Long Beach/Moffatt & Nichol**

Mr. Patel's Role: Key contributor to the design of Port of Long Beach CCTV Surveillance Project. The security system project included various Night/Day and Infra-Red Cameras – PTZ & Fixed, Wireless Line of Sight Transmitters/Receivers, Perimeter Sensors, PC, and integration to Security/ Communications Command Control Center. The Facility's security areas included Dock Yard Terminals, Waterfront, Fence Perimeter, Guarding of Bridges, Petroleum and Chemical Storages.

### **Port of Los Angeles/SAIC**

Mr. Patel's Role: Key design contributor to the security assessment and review of the Port of Los Angeles. Performed field surveys and stakeholder interviews to develop an enhanced access control and identification system. The facility reviews included security of perimeter, key control, intrusion alarm, lighting, video surveillance, guard service and access control. The Facility security areas included Container/Cargo Terminals, Marine Oil Terminals, Warehouses, Perimeter and Guarding of Public Facilities.

### **Port of San Diego/Moffatt & Nichol**

Mr. Patel's Role: Key contributor to the design of the Port of San Diego CCTV Surveillance Project. The security system project included various Night/Day, and Infra-Red Cameras – PTZ & Fixed, Wireless Line of Sight Transmitters / Receivers, PC, and Fiber-Optic Network integration to Security/Communications Command Control Center. The Facility security areas included Ship Terminals, Waterfront, Fence Perimeter and Guarding of Warehouses.

### **Foley Federal Building, Las Vegas**

Mr. Patel's Role: System Design Engineer for Foley Federal Building CCTV Surveillance Project. The security system project included various Night/Day Cameras – PTZ & Fixed, Access Control & ID, Intrusion Detection, emergency duress alarms, and intercoms systems interfaced to Security/Communications Command Control Centers. The Facility security areas included Court Rooms, Corridors, Stairs, Escalators, Parking and Fence Perimeters.

### **Mark Systems, Inc., Moorpark, CA**

Mr. Patel's Role: Worked on the new Denver Airport Fiber Optical Security and Construction of Design.