



#### EDUCATION

- Drexel University
  - Bachelor of Science, Electrical and Computer Engineering, 2011

#### PRACTICE AREAS

- Electrical Engineering
- Electrical Testing
- Inspections
- Peer Review
- Design
- Dynamic Testing and Analysis
- Computer-Aided Drafting
- Construction Observation and Troubleshooting
- Heavy Movable Structures
- Emergency Response

#### REGISTRATIONS

- Certified HVAC Technician
- Professional Engineer in CA, MD, MI, NJ, NS, NY, ON, and WA

#### PROFESSIONAL AFFILIATIONS

- Institute of Electrical and Electronic Engineers (IEEE)

#### CONTACT

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#### EXPERIENCE

Lin Xu is an electrical engineer with more than seven years of diversified experience in the application of electrical power and control engineering. He works with all aspects of movable bridge electrical system design and inspection including bridge power and control systems. Mr. Xu has been involved in the development of electrical system design documents, the sizing of electrical equipment, and has performed electrical system analysis. He has acquired experience in the operation of medium- and low-voltage switchgear, emergency generators, lighting design, access control systems, fire alarm systems, and control automation. He is also experienced in alternative energy installations, including solar and dynamic braking energy recovery.

#### REPRESENTATIVE PROJECTS

- Passyunk Bridge - Philadelphia, PA: Visual inspection of existing electrical power and control system for twin double-leaf bascule bridge including electrical testing of on-site equipment
- NS Railroad In-Depth Movable Bridge Electrical Inspection - East Branch, VA: Inspection of electrical operating systems, load testing of motors and drives systems, and insulation resistance testing
- Sir Ambrose Shea Vertical Lift Bridge - Placentia, NL, Canada: Design of the new bridge electrical control system and vertical cable supporting system; engineering services during construction and commissioning
- West Third Street Vertical Lift Bridge - Cleveland, OH: Development of electrical design drawings, droop cable catenary design study, and calculations
- Burlington Canal Vertical Lift Bridge - Burlington, ON, Canada: Comprehensive detailed inspection of bridge; control system integrator for recent rehabilitation that included replacement of a major part of the electrical power and control system
- Saugatuck Swing Bridge - Westport, CT: Emergency services for recovery of storm-damaged bridge as part of design-build team; rebuilding of the electrical control system to restore the bridge operation
- Newark International Airport - NJ: Design of the 13.2kV feeder system replacement; arc flash study for the entire airport power distribution system
- St. Peter's Canal Swing Bridge - NS, Canada: Control system design for new center-bearing, bobtail swing bridge with electrohydraulic operating machinery to replace existing bridge
- Norfolk Southern Railroad System-Wide Movable Bridge Inspections - AL, LA, and NC: Initial inspections and evaluations followed by subsequent annual inspections; electrical inspections, insulation resistance testing, drive and motor load testing, and verification of operation sequence
- Fort Madison Swing Bridge - Fort Madison, IA: Design of bridge control system and motor and drive system upgrade while keeping the bridge operational with minimum downtime for railroad and highway traffic
- Sir Ambrose Shea Vertical Lift Bridge - Placentia, NL, Canada: Bridge design and construction service; design of unique vertical support structures for fiberglass cable ladders
- Quogue Bridge - Suffolk County, NY: Electrical design development of replacement drive system for double-leaf bascule bridge; electrical equipment layout and development of control system conceptual sequence of operation to accept new bridge drive system
- LaSalle Causeway Bascule Bridge - Kingston, ON, Canada: Design of bridge motor and drive replacement and control system modification to allow the bridge to operate on new drive system
- Hogs Back Swing Bridge - Ottawa, ON, Canada: Development of electrical design drawings and interface for the bridge hydraulic system
- Islais Creek Bascule Bridge - San Francisco, CA: Development of the bridge electrical rehabilitation design and coordination with traction power and signal systems for the highway and light rail system
- Tamiami Canal Bascule Bridge - Miami, FL: Bridge electrical system integrator during construction
- Johnson Street Bridge - Victoria, BC, Canada: Electrical design development for this single-leaf bascule bridge