

## **Senior Systems Engineer**

### **Rail, Transit & Complex Infrastructure**

**Location:** Vancouver, BC (hybrid, with travel to client sites) **Type:** Full-time, permanent

**Compensation:** Competitive salary, comprehensive benefits, flexible work, professional development

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**Think in systems. Build with people. Deliver what works.**

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### **About SysEne (sis-een)**

SysEne brings together systems engineering and a systems approach to project management. We help owners and transit authorities deliver complex infrastructure by connecting technology, processes, and people across the full life cycle. Grounded in INCOSE best practices and international standards, we define, architect, and assure complex systems throughout their life cycle.

We're a small, high-standards team. We work across a wide range of owners building or upgrading critical capabilities in transit, digital infrastructure, smart mobility, and more. If you want to do work that is technically demanding and genuinely consequential, grow a practice, and help shape how a consultancy delivers, SysEne is where you do that.

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### **The Opportunity**

We are hiring a Senior Systems Engineer to take on lead technical roles across rail, transit, and smart mobility programs. You will lead architectural thinking on complex engagements, act as a trusted advisor to owners, and help grow SysEne's capability and client relationships over time.

You will also mentor junior and mid-level engineers, contributing to how the team learns and develops. This is a player-coach role. We expect you to be in the work, not above it.

SysEne recognizes a Principal Systems Engineer designation for candidates who demonstrate mastery of the craft. The right person could move into that designation quickly. We are looking for someone mid-career who is still growing.

This role suits someone who is as comfortable in a client workshop as in a boardroom. Someone who understands that delivering complex systems is as much about organizational alignment as technical rigour.

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## **What You Will Do**

### **Technical Leadership and Architecture**

- Lead systems architecture development across multi-subsystem programs, defining structure, boundaries, interfaces, and key design decisions
- Own trade studies and options analysis, helping owners evaluate choices against cost, performance, risk, and schedule
- Provide technical oversight across requirements, architecture, V&V, and integration on active engagements
- Contribute to assurance cases, independent V&V reviews, and governance frameworks on safety-critical programs

### **Owner-Side Advisory**

- Act as a senior technical advisor to owners, representing their interests from concept through commissioning
- Frame trade-offs, risks, and implications across technical, operational, and organizational dimensions
- Support project managers and clients with feasibility studies, stakeholder engagement, and decision support
- Support definition of life-cycle concepts (acquisition, deployment, operations, sustainment, disposal) aligned with applicable standards and governance frameworks

### **Practice Development**

- Mentor junior and mid-level engineers and actively contribute to their technical growth
- Lead and contribute to proposals, statements of work, and effort estimates
- Build and maintain trusted client relationships that support SysEne's growth
- Contribute to SysEne's technical standards, methods, and knowledge base

## **Stakeholder Engagement**

- Build trusted working relationships with clients, contractors, operators, and regulators
  - Prepare and deliver technical reports, briefings, and presentations for varied audiences including executive and non-technical stakeholders
  - Navigate organizational dynamics with credibility and professionalism
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## **What You Bring**

### **Required**

- Engineering degree (Systems, Electrical, Computer, Mechanical, or related); EGBC P.Eng. designation or eligibility preferred
- 8 or more years of systems engineering experience, with demonstrated lead or senior roles on complex programs
- Proven experience in systems architecture, requirements management, and V&V across more than one life-cycle phase
- Experience in owner-side, advisor, or integrator-facing roles
- Working knowledge of ISO/IEC/IEEE 15288 and ISO/IEC/IEEE 42010
- Familiarity with INCOSE systems engineering practices and handbook
- Proven ability to build trust with diverse stakeholders, navigate organizational and political dynamics, and listen past what people ask for to understand the actual need behind the request
- Strong written and verbal communication with both technical and executive audiences

### **Helpful**

- Rail, transit, or smart mobility sector experience
- Knowledge of rail safety standards such as EN 50126, EN 50128, or EN 50129
- Digital infrastructure, IoT, or operational technology programs experience
- INCOSE CSEP certification

- Familiarity with MBSE tools or architecture frameworks (UAF, TOGAF)
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### **What Sets You Apart**

- You have led the full arc of a complex system from concept and architecture through verification to a working system that meets customer expectations
  - You understand that organizational and political dynamics shape technical outcomes, and you navigate both with credibility
  - You ask good questions before jumping to solutions
  - You form clear positions with incomplete information and defend them constructively as understanding evolves
  - You make complexity clear and actionable for the people who need to decide
  - You invest in the people around you as much as the work itself
  - You are a learner. You read, share what you know, and invest in the craft as much as the delivery
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### **What We Offer**

- Meaningful work on infrastructure and systems that owners and communities depend on
  - A senior role with real technical authority and room to shape how the practice grows
  - Mentorship from experienced practitioners and an active knowledge-sharing culture
  - Flexible hybrid work and genuine work-life balance
  - Competitive salary, comprehensive benefits, paid vacation, and professional development
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### **How to Apply**

Submit your resume and a cover letter describing a complex program you led or made a decisive technical contribution to. Tell us what the challenge was, what you decided, and what the outcome was.

*SysEne is an equal opportunity employer committed to diversity and inclusion. We welcome applications from all qualified individuals.*