

Samuel Kennedy, M. Eng, PMP, EIT

Contract Systems Engineer

Industrial IoT | Monitoring Systems | Deployment | Process Improvement

Calgary, AB | sam.kennedy@live.ca | (647) 703-7898

LinkedIn: linkedin.com/in/samken415/ | Portfolio: samjkennedy.com

PROFESSIONAL PROFILE

Mechanical and Industrial Engineering professional with experience across IoT, monitoring systems, telecommunications, and infrastructure projects. Background includes systems integration, embedded sensing, technical requirements definition, and deployment of practical engineering solutions across hardware, software, and stakeholder environments.

CORE CAPABILITIES

Systems & Industrial Engineering

- Systems Integration (hardware/software/networked systems)
- Industrial and Operational Systems Design
- Requirements Engineering & Technical Architecture
- Mechatronics and Embedded System Integration
- Root Cause Analysis & Troubleshooting
- Process Improvement & Operational Optimization

Technical Tools & Platforms

- Remote Monitoring: Telemetry, Environment Sensing & Infrastructure Monitoring
- Python, C#, C, JavaScript, SQL, VBA
- SolidWorks, AutoCAD, Fusion 360, ANSYS, Abaqus
- ERP / CRM systems (Salesforce, enterprise platforms, GRC)
- IoT / networked systems environments (LoRa, Sigfox, PLC, Modbus)

Project Delivery

- Agile / SAFe Delivery Environments
- Technical Project Execution & Coordination
- Cross-functional Engineering Coordination
- Vendor Management

PROFESSIONAL EXPERIENCE

FONTUR International — Solutions Engineer (Independent Contractor via Incorporated Entity)

Oct 2020 – Present | Remote & Client Sites

Led multidisciplinary engineering projects involving monitoring systems, sensing technologies, telecommunications, and infrastructure initiatives utilizing integrated hardware, software, and network systems. Projects involved both remote engineering support and travel to client sites for deployment, implementation, troubleshooting, and technical coordination activities. Managed project risks, delivery timelines, and stakeholder expectations while reporting directly to executive leadership.

Selected Engineering Engagements:

Transportation Infrastructure (Metrolinx)

- Led delivery of Sigfox-enabled monitoring initiatives supporting distributed transportation assets and remote infrastructure.
- Owned requirements gathering, solution definition, stakeholder coordination, and implementation support for:
 - railway bungalow occupancy/use monitoring
 - snow-clearing equipment monitoring (temperature, vibration, current draw)
 - environmental monitoring systems (lightning, wind, humidity)
- Directed development of associated monitoring interfaces and reporting systems

Environmental Monitoring

- Led deployment of lightning sensing systems integrating remote monitoring with alerting capabilities, involving exploratory environmental monitoring initiatives for golf course operations.

Commercial / Infrastructure Projects

- Managed technical execution and on-site deployment support for Disney theme park IoT infrastructure reinstalls requiring coordination across hardware, communications, and operational systems.
- Led early-stage parking monitoring and infrastructure sensing initiatives.

Healthcare Monitoring Concepts

- Supported development of early-stage monitoring concepts for occupancy / patient detection within care environments.

Technical Delivery

- Led requirements gathering and technical discovery sessions.
- Translated operational requirements into deployable architectures.
- Coordinated between engineering, software, and client stakeholders.
- Reported project status, risks, and delivery outcomes directly to executive leadership.

Bell Canada — Technical Business Analyst (IoT Team) (Independent Contractor via Incorporated Entity)

Nov 2022 – Nov 2024 | Remote

Supported IoT product, operations, and delivery teams through requirements translation, documentation development, and cross-functional coordination.

- Developed procedures supporting operational consistency and deployment processes.
- Evaluated compatibility and implementation requirements for IoT systems.
- Coordinated communication between technical and business teams.
- Assisted product-adjacent teams in translating requirements into deployable actions.

Skyrise Prefab — Software Development Manager

Jul 2019 – May 2020 | Toronto, ON

Supported internal tooling and systems initiatives within prefabricated construction environments.

Projects included:

- CAD workflows supporting prefabricated construction
- Rapid estimation tools for building concepts and sales support
- ERP implementation initiatives
- Internal IT and systems support
- Also supported process improvements and technical coordination activities.

EARLIER ENGINEERING EXPERIENCE

Standard Model Partners — Technical Business Analyst (Enablon/GRC implementation) | 2018

Index Exchange — Software Developer | 2018

Shaw Communications — Technology Compliance Analyst | 2017

PepsiCo — Supply Chain Analyst | 2016

Chemetics (Jacobs Engineering) – ERP Project Coordinator | 2013

EDUCATION

University of Calgary

Master of Engineering, Mechanical and Manufacturing Engineering | Completed 2026
Focus on Mechatronics (Integration of mechanical, electronic, and computing systems)

University of Waterloo

Honors BAsC, Industrial (Management) Engineering | 2019
Graduated with Distinction

CERTIFICATIONS

Engineering in Training (EIT) – APEGA | Project Management Professional (PMP) | Embedded Systems Engineering Certificate (UCI-Irvine) | Trade Fundamentals (Durham College) | SAFe 5 Product Owner / Product Manager