

Job Description: **Systems and Sensors Engineer (mechanical/mechatronics)**

**About Kepstrum:**

Kepstrum is the inventor of the Intelligent Reliability Technology with reputable customers in Europe and NA. Kepstrum has technical centers, development and manufacturing facilities in Vaughan Ontario, Leobersdorf Austria and Lohr Germany (in preparation).

**Purpose:**

You will be acting as part of our predevelopment team in Canada to bring a new perspective of the advanced controls technologies to Kepstrum's product portfolio.

**Focus:**

- **System analysis**
  - Fluid dynamics
  - Structural dynamics
  - P&ID classical control
  - Sensors and signals and mechatronics design
  - Mechanical elements
  - Basic mechanical design and drawings
- **Controls architecture**
  - Distributed control system analysis
  - Selecting controls hardware and sensors
  - Preparing object list and I/O configuration
- **Sequence charts and interlocking**
  - Transforming the system information and requirements into sequence charts and machine and human safety interlocks
  - Digital / Analog I/O allocation/selection
- **Controls logic**
  - System logic flow charts for closed loop and open loop controls
  - Selecting the controls and sensor technologies for Kepstrum's future products
- **Coding**
  - PLC control coding with structural text IEC61131
  - Signal processing techniques
  - C++ and object oriented programming
  - HMI programming (Visual Studio)
  - Vision systems (Matlab tools)
- **Implementation**
  - Development testing at Kepstrum technical center and the customer site
  - Control system tuning and troubleshooting

**Knowledge:**

- Mechanical, Mechatronics, Systems, Engineering Physics or equivalent Degree
- Excellent verbal, communication and presentation skills