

# Shervin Khazaeli

LinkedIn: <https://www.linkedin.com/in/shervinkh>

Website: <https://moderncan.github.io>

Email: [shervin.khazaeli@gmail.com](mailto:shervin.khazaeli@gmail.com)

Mobile: +1 514 836 2310

## SUMMARY

**Senior Data Scientist** with extensive expertise in designing and implementing advanced machine learning solutions, driving over \$60M in cost savings. Proven leader of cross-functional teams, fostering innovation and mentoring emerging data scientists. Skilled at collaborating closely with stakeholders to ensure high-quality project delivery and achieving strategic objectives.

## EXPERIENCE

- **Trinnex (CDM Smith)** Canada/USA  
*Senior Data Scientist (Full-time)* 2022 - Present
  - **Analytics development:** Designs and implements advanced Machine Learning (ML)-based solutions, focusing on predicting material compositions of water service lines, identifying anomalies, and forecasting break occurrences. Deploys and monitors end-to-end ML pipelines ensuring seamless integration and optimal performance in real-world applications. The predictive models and optimized inspections help clients manage their LCRR/LCRI programs and comply with LCRR/LCRI Regulations.
  - **Leadership:** Leads a multifunctional team of developers in the creation of innovative web-based applications aimed at predicting water main breaks. Collaborates with cross-functional teams to address deployment related challenges and enhance the operational efficiency of ML solutions. Mentors data scientist for personal and career development.
  - **Strategic innovation:** Fosters a collaborative environment with stakeholders to identify opportunities for the implementation of ML-driven solutions, contributing to the development of cutting-edge projects and ensures the delivery of high-quality products.
- **Polytechnique Montréal** Canada  
*Research Assistant (Full-time)* 2018 - 2022
  - **Framework development:** Designed & implemented an autonomous anomaly detection framework for civil infrastructures.
  - **Algorithm/Software development:** Improved and developed Bayesian dynamic linear models and coupled them with reinforcement learning for anomaly detection
  - **Communication:** Periodic meetings and preparation of the reports for Ponts Jacques Cartier et Champlain incorporée
- **Smart City X** Canada  
*President & Co-founder* 2017 - 2018
  - **Smart Systems:** Designed and led events enhancing the application of the smart systems and sensors for monitoring of infrastructures, water resources, and public health.
- **Sensequake Inc.** Canada  
*Consultant (Part-time, Contractual)* 2016 - 2017
  - **Data acquisition & analysis, and report preparation:** Planned & installed sensors, and acquired high quality sensory data for data analysis; Built data-driven models from sensory data for seismic assessment of civil structures; preparing comprehensive assessment reports for the clients.
  - **Process automation:** Automated various data acquisition and analysis procedures.
- **Concordia University** Canada  
*Research Assistant (Full-time)* 2014 - 2017
  - **Cloud Architecture development:** Designed & implemented cloud-based solution for structural health monitoring using AWS.
  - **Framework development:** Developed framework for damage detection and identification using data-driven models.
  - **Instructor:** Designed & offered the course “Probabilistic Graphical Modeling” to build causality models in various disciplines.
- **Udemy Inc.** Remote  
*Instructor*
  - **Presentation Design MasterClass | LaTeX:** Designed & offered the course to mastery the art of the presentation using LaTeX.

## EDUCATION

- **Polytechnique Montréal** Canada  
*PhD- Civil Engineering (Artificial Intelligence)*  
**Keyword:** Reinforcement Learning, Imitation learning, Decision Making, Probability, Bayesian Model