Shervin Khazaeli

LinkedIn: https://www.linkedin.com/in/shervinkh Mobile: +1 514 836 2310

Website: https://moderncan.github.io

SUMMARY

Senior Data Scientist with extensive expertise in designing and implementing advanced machine learning solutions, driving over \$60M in cost savings. Proven leader of multifunctional 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)

Senior Data Scientist (Full-time)

Canada/USA

2022 - Present

Email: shervin.khazaeli@gmail.com

- 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
- o 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.

Instructor Remote

• Presentation Design MasterClass | LaTeX: Designed & offered the course to mastery the art of the presentation using LaTeX.

EDUCATION

Polytechnique Montréal

Canada

 $PhD\hbox{-}\ Civil\ Engineering\ (Artificial\ Intelligence)$

Keyword: Reinforcement Learning, Imitation learning, Decision Making, Probability, Bayesian Model