# VINCENT QUENNEVILLE-BÉLAIR

## EXPERIENCE

## Machine Learning Scientist. Facebook AI.

2019-Now

Develop the deep learning torchaudio library for audio and speech. Lead research collaborations between academia and the PyTorch open source community. Enhance PyTorch optimizers by identifying and integrating latest algorithms.

## Machine Learning Scientist. Amazon.

2017-2019

Generate long-term strategic inventory capacity forecast. Model counterfactual scenarios. Optimize supply chain expansion recommendations.

Build causal impact models to estimate advertising campaign lift. Infer future returns and optimize advertising portfolio.

Teach internal machine learning specialization course series on matrix factorization, dimensionality reduction, and recommender systems.

#### Chu Assistant Professor of Applied Mathematics. Columbia University.

2015-2017

Model gravitational wave propagation to understand black hole collisions. Create and analyze novel specialized mixed finite element methods to simulate these models numerically.

#### Chief Data Scientist. Vizanda.

2016-2017

Develop web-based software to automatically extract information from structured and unstructured data on the fly. Process the information to programatically generate relevant visualizations and intelligent insights.

# EDUCATION

PhD Applied Mathematics. University of Minnesota.

NSERC Alexander Graham Bell Canada Graduate Scholarship University of Minnesota Doctoral Dissertation Fellowship Mentored over 20 teams for international Mathematical Contest in Modeling

MCS Computer Science. University of Minnesota.

**MSc Applied Mathematics.** University of Minnesota.

FQRNT Research Scholarship

BSc Mathematics and Physics. McGill University, Canada.

Twice meritorious winner in international Mathematical Contest in Modeling First class honors

**Technologies.** Python, PyTorch, Scikit-Learn, SQL, Spark, Linux.