

# VINCENT QUENNEVILLE-BÉLAIR, PHD

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## EXPERIENCE

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- Machine Learning Scientist.** Amazon. 2021-Now
- Machine Learning Engineer.** Facebook AI. 2019-2021  
Lead development of the open source PyTorch torchaudio library and optimization module.  
Develop deep learning models and training pipelines for audio and speech recognition.
- 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 machine learning specialization course series on matrix factorization, dimensionality reduction, and recommender systems, at the Amazon Machine Learning University.
- 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 software to automatically extract information from structured and unstructured data on the fly. Programatically generate relevant visualizations and intelligent insights.

## EDUCATION

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- PhD Applied Mathematics.** University of Minnesota.  
NSERC Alexander Graham Bell Canada Graduate Scholarship  
University of Minnesota Doctoral Dissertation Fellowship
- 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.