

Xuechun (Leonie) Lu ^{MMath}

@ UWaterloo

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ABOUT ME

I solve problem

Programming Python · R · PySpark (SQL) · JAVA · MATLAB · C++

Data Science TensorFlow · Keras · PyTorch · Scikit Learn · Pickles · NumPy · Pandas · Tidyverse · ggplot2

Platform GitHub · JupyterLab · Colab

Modelling Machine Learning · Deep Learning · Clustering · Ensemble Learning

EXPERIENCE

ManuLife

Waterloo, ON

Research Assistant

Jan 2021 - Current

- Developed ML model based on prospect's medication history to predict insurance duration to maximize insurance profit
- Met with clients and understood their need, identified and developed solutions that bring the most business values from data
- Weekly meeting with clients to track project progress and constantly improve the quality of deliverables
- Built multiple Machine learning models (XGBOOST, KNN) pipeline in Jupyter Notebook using **PySpark, Python and R**

Altus Group

Vancouver, BC

Research Assistant

Jan 2020 - May 2020

- Provided prediction on property mill rates for better clients billing process
 - Conducted raw data preprocessing and exploratory data analysis to fulfill client's objective
 - Designed ML (L1, L2 Regression) models to predict 2020 property mill rates for residential, light industry and business properties in Metro Vancouver
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PROJECT

Classification Based on A Histopathology Dataset (2021)

<https://xuechunlu7.github.io/project1>

Implemented a PointNet inspired deep network that identified major lung tumors given a set of tissue images using **TensorFlow, PyTorch with 90% accuracy**

NLP - Sentence Ordering (2021)

<https://xuechunlu7.github.io/project2>

Given a set of unordered sentences, used **Bert Model + Topological Sort** to predict the correct order using **PyTorch**

Risk Prediction in Life Insurance Industry (2020)

<https://xuechunlu7.github.io/project3>

Used **PCA and CFS** to reduce data dimensions and classified risk levels of insurance buyers using **regression, neural network, random forest and REP trees in R**

EDUCATION

Master of Mathematics in Statistics, University of Waterloo

2020 - 2021

- Data Science
- Graduate Research Scholarship

Bachelor of Science in Statistics, University of British Columbia

2016 - 2020

- Statistics, Economics, Mathematics
- Faculty of Science International Student Scholarship