Resume

Personal Information

First name / Surname: Daniela-Laura Manolache
E-mail: manolache.laura@icloud.com
Telephone: +1 514 449 4256
Profiles: GitHub LinkedIn Blog

Experience

Data Analyst/ Research Assistant - Concordia University Jan 2016-Apr 2018
— Perform predictive analysis on collected data from numerical models in civil engineering
Research papers of ML with application in civil engineering: 1, 2

Teaching Assistant - Concordia University Jan 2016-Apr 2018
— Graduate and Undergraduate Courses and Labs in Civil Engineering

Team member/ Engineer - SmartCityX Sep 2016-Jun 2017
— Advocate, content creator and instructor for workshops on Probabilistic Graphical Modeling (PGM) for graduate students from various disciplines/domains.

Projects

Churn Prediction and Survival Analysis using Commercial Game Log Data: API suitable for deployment; input-output unit test
Game Recommender: Content-Based Recommender focus on properties of games;
DataCup 18 Desjardins: Predictive model for consumer spending habits
Project description: Predict as to whether a client is likely to be delinquent on their payments in the coming year; Applied Logistic Regression, Random Forests, Gradient Boosting, Automated Model Tuning (Bayesian Optimization- Hyperopt); AUROC Curve with a 86.4% score.

Education

Open-Source "Masters", Machine Learning and Statistics 2018-2019
A twelve-month, self-curated deep-dive into select topics in machine learning and statistics. Educational resources derived from massive open online courses (MOOCs), textbooks, predictive modeling competitions (Kaggle) and academic research (arXiv)

Concordia University, Montreal –Canada - PhD Student 2016–2018

TUCEB, Romania / University of Pisa - MSc in Civil Engineering 2013–2015
Research on the probabilistic approach to civil and structural engineering research: project aimed to apply modern reliability methods for the assessment of prestressed concrete slabs.

Technical University of Civil Engineering Bucharest – BSc in Civil Eng. 2009–2013

Mathematical Tools and Statistical Analysis

Linear Regression, Logistic Regression, Decision Tree, Random Forest, Boosting, SVM, kNN, Neural Networks, Naive Bayes, Clustering, PCA, Recommender Systems, NLP, Churn/Survival Analysis, A/B Testing

Data and Analytics Tools/Languages:

Languages: C++ (>3yr), Python & scientific stack (2+yr, Pandas, NumPy, SciPy, scikit-learn, Plotly tools (Express, Cufflinks), Featuretools, Dask, NLTK, Keras), PySpark(2+yr), SQL(3+yr), HTML, CSS
Database: MongoDB, PostgreSQL, Oracle, SparkSQL
IDE/Tools: Visual Studio, PyCharm, Jupiter Notebook, Databriks Notebook, Docker, Git, Flask
Data visualization: Tableau, Exploratory
Cloud computing services, big data pipelines: AWS S3, Hadoop

Personal

Languages: English (6.5 IELTS-Academic), French (Intermediate), Italian (fluent),