Iryna Korshunova - Curriculum vitae

LocationGhent, BelgiumEmailirene.korshunova@gmail.comDate of Birth 27^{th} April 1991

Education

2015–2019 PhD in Machine Learning - Reservoir Lab, Ghent University, Belgium

2013-2015 MSc in Statistical Data Analysis - Ghent University, Belgium

Graduated magna cum laude

Thesis: "Epileptic seizure prediction using deep learning" [pdf]

2012-2015 MSc in Applied Mathematics - National Technical University of Ukraine "Kiev Polytechnic Institute", Ukraine

Diploma with honours

2008-2012 BSc in Applied Mathematics - National Technical University of Ukraine "Kiev Polytechnic Institute", Ukraine

Diploma with honours

Thesis: 'Classification of functional data using free knots splines'

Extra Courses

July 2015 Machine Learning Summer School -Max Planck Institute for Intelligent Systems, Tübingen, Germany

August 2015 Deep Learning Summer School - Université de Montréal, Montreal, Canada

Research assistantships

Summer, Grammarly Inc., Kiev, Ukraine **2013** Research Engineer Intern

Created a multipurpose Wikipedia-based corpus; trained a topic model and implemented an algorithm for its evaluation, integrated this model into contextual spell checker; compared the

performance of several named-entity recognizers.

Technologies: Java SE, Mallet, Apache OpenNLPI.

Projects

National Data Science Bowl (team Deep Sea 1st/1049, Kaggle) [blog post]

American Epilepsy Society Seizure Prediction Challenge (10th/504, Kaggle) [code, blog post]

DecMeg2014 - Decoding the Human Brain (19th/ 267, Kaggle) UPenn and Mayo Clinic's Seizure Detection Challenge (56th/200, Kaggle) [code]

Numerically stable implementation of Viterbi and Forward-Backward algorithms in context of Hidden Markov Models [code in C++]

Application for melody generation and its harmonization [code in Java]

Publications

Bob L. Sturm, João F. Santos, and Iryna Korshunova Folk Music Style Modelling by Recurrent Neural Networks with Long Short Term Memory Units // International Society for Music Information Retrieval (ISMIR) conference, October 2015. (late-breaking demo) [pdf, code]

Iryna Korshunova, Lionel Pigou, Pieter Buteneers, Sander Dieleman, Joni Dambre Epileptic seizure prediction using convolutional neural networks // 31 st International Epilepsy Congress, September 2015 (accepted for a best poster presentation) [poster]

Iryna Korshunova Classification of functional data with free knots splines // System Research and Information Technologies. — 2014. — \mathbb{N}_2 2. — P. 115–124 [abstract]

Interests

Playing cello Hiking