Iryna Korshunova

Location Ghent, Belgium & London, UK
Email irene.korshunova@gmail.com

Website irakorshunova.github.io
Github github.com/IraKorshunova
Kaggle kaggle.com/golondrina

Education

2018- **Visiting PhD student** - Gatsby Computational Neuroscience Unit, UCL, London, UK
Supervisor: Arthur Gretton

2015- **PhD student in Machine Learning** - Reservoir Lab, Ghent University, Belgium

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

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

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

Extra Courses

2018 Gaussian Process Summer School @ University of Sheffield

2018 Microsoft Research AI Summer School @ MSR Cambridge (received a poster prize)

2015 Deep Learning Summer School @ University of Montreal

2015 Machine Learning Summer School @ Max Planck Institute, Tübingen (received a travel stipend)

Work experience

Summer, 2017 Twitter, London, UK
Research Intern
Supervisors: Lucas Theis, Ferenc Huszár
Pruned neural networks, contributed to PyTorch

Summer, 2016 Twitter / Magic Pony Technology, London, UK
Research Intern
Supervisors: Lucas Theis, Ferenc Huszár
Developed a real-time face swapping method based on neural style transfer

Summer, 2013 Grammarly, Kiev, Ukraine
Research Engineer Intern
Worked on the evaluation of topic models and their integration into a contextual spell checker

Awards

2017 Data Science Bowl 2017 (Kaggle)
9th place, $25K prize, team Deep Breath
Lung cancer prediction from chest CT scans

2016 Second Annual Data Science Bowl (Kaggle)
2th place, $50K prize, team kunsthart
Cardiac volumes estimation based on 4D MRI-data of a heart

2015 National Data Science Bowl (Kaggle)
1st place, $100K prize, team Deep Sea
Classification of plankton images

2014 American Epilepsy Society Seizure Prediction Challenge (Kaggle)
10th place, top 2%
Epileptic seizure prediction based on iEEG signals

Publications

Iryna Korshunova, Jonas Degrave, Ferenc Huszár, Yarin Gal, Arthur Gretton, Joni Dambre. BRUNO: A Deep Recurrent Model for Exchangeable Data. *Accepted to Neural Information Processing Systems (NIPS), 2018*; preprint arXiv:1802.07535.

Lucas Theis, **Iryna Korshunova**, Alykhan Tejani, Ferenc Huszár. Faster gaze prediction with dense networks and Fisher pruning. *Preprint* arXiv:1801.05787, 2018.

Iryna Korshunova, Wenzhe Shi, Joni Dambre, Lucas Theis. Fast face-swap using convolutional neural networks. *IEEE International Conference on Computer Vision (ICCV), 2017*; arXiv:1611.09577

Iryna Korshunova, Pieter-Jan Kindermans, Jonas Degrave, Thibault Verhoeven, Benjamin Brinkmann, Joni Dambre. Towards improved design and evaluation of epileptic seizure predictors. *IEEE Transactions on Biomedical Engineering, 2017*; DOI: 10.1109/TBME.2017.2700086

Benjamin H. Brinkmann, Joost Wagenaar,..., **Iryna Korshunova** et al. Crowdsourcing reproducible seizure forecasting in human and canine epilepsy. *Brain Jun 2016, 139 (6) 1713-1722;* DOI: 10.1093/brain/aww045

Bob L. Sturm, João F. Santos, Oded Ben-Tal, **Iryna Korshunova**. Music transcription modelling and composition using deep learning. *1st Conference on Computer Simulation of Musical Creativity*; arXiv:1604.08723 [code]

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 conference, 2015* [pdf, code]

Iryna Korshunova Epileptic seizure prediction using deep learning. *Master dissertation*, 2015 [pdf]

Iryna Korshunova Classification of functional data with free knots splines. *System Research and Information Technologies 2014, 115–124;* [abstract]

Other

Languages

Ukrainian, Russian - native
English - full professional proficiency
Dutch - intermediate

Personal interests

Playing cello (formerly at Ghent University Symphony Orchestra)