Iryna Korshunova

Location	Ghent, Belgium & London, UK	**Website**	irakorshunova.github.io
Email	irene.korshunova@gmail.com	**Github**	github.com/IraKorshunova
		Kaggle	kaggle.com/golondrina

Education

Oct, 2017-   **Visiting PhD student** - Gatsby Computational Neuroscience Unit, UCL, London, UK
Supervisor: Arthur Gretton

Oct, 2015-   **PhD student in Machine Learning** - 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 "Kyiv Polytechnic Institute"
Diploma with honours

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

Extra Courses

2019   Machine Learning Summer School @ University College London (as tutorial helper)

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

Spring, 2019   Twitter, London, UK
Research Intern (supervised by Lucas Theis)
Researched logistic LDA – the first discriminative neural topic model (NeurIPS 2019)

Summer, 2017   Twitter, London, UK
Research Intern (supervised by Lucas Theis)
Pruned neural networks, contributed to pytorch

Summer, 2016   Twitter / Magic Pony Technology, London, UK
Research Intern (supervised by Lucas Theis and Ferenc Huszár)
Developed a real-time face swapping method based on neural style transfer (ICCV 2017)

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	

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9th place, $25K prize, team Deep Breath
Lung cancer prediction from chest CT scans

2016   **Second Annual Data Science Bowl (Kaggle)**
2nd 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
Epileptic seizure prediction based on iEEG signals

Publications

Iryna Korshunova, Hanchen Xiong, Mateusz Fedoryszak, Lucas Theis. Discriminative topic modeling with logistic LDA. *Neural Information Processing Systems (NeurIPS), 2019*; arXiv:1909.01436

Iryna Korshunova, Yarin Gal, Joni Dambre, Arthur Gretton. Conditional BRUNO: a deep recurrent process for exchangeable labelled data. *European Symposium on Artificial Neural Networks (ESANN), 2019; NeurIPS workshop on Bayesian Deep Learning, 2018.*

Iryna Korshunova, Jonas Degrave, Ferenc Huszár, Yarin Gal, Arthur Gretton, Joni Dambre. BRUNO: a deep recurrent model for exchangeable data. *Neural Information Processing Systems (NeurIPS), 2018*; arXiv:1802.07535 [code]

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. *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, 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, **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* [abstract]

Other

Frameworks: tensorflow, pytorch, theano, lasagne
Languages: fluent in Ukrainian, Russian, Dutch and English
Hobbies: playing cello, ballroom and latin dancing, fabric painting