Serhii Havrylov

Current location	Edinburgh, UK	**Github**	github.com/serhii-havrylov
E-mail	sergii.gavrylov@gmail.com	**Linkedin**	linkedin.com/serhii-havrylov
Website	serhii-havrylov.github.io	**Slideshare**	slideshare.net/SergiiGavrylov

Education

Oct 2017 – PhD student – Institute for Language, Cognition and Computation, University of Edinburgh

Mar 2016 – Sep 2017 PhD candidate – Institute for Logic, Language, and Computation, University of Amsterdam

2012 – 2014 MSc in Applied Mathematics – National Technical University of Ukraine
Diploma with honours

2008 – 2012 BSc in Applied Mathematics – National Technical University of Ukraine
Diploma with honours

Work experience

Jun 2018 - Sep 2018 Facebook AI Research
Research Intern (AI)

During the internship, a novel model for learning latent tree parsers had been developed. The results are published at NAACL-HLT 2019.

Oct 2013 - Apr 2016 Grammarly
Research engineer

Researching, prototyping and implementing machine learning algorithms for improving the accuracy of Grammarly's language core.

Sep 2015 - Oct 2015 Clashot
Machine learning consultant

Consulting R&D team on how to build automatic image tagging and description generating systems.

May 2013 - Oct 2013 Silver Cup
Quantitative analyst

Applying machine learning techniques for development and improvement trading strategies.

Publications

Guo, S., Ren, Y., Havrylov, S., Frank, S., Titov, I., Smith, K. The Emergence of Compositional Languages for Numeric Concepts Through Iterated Learning in Neural Agents. // EmeCom NeurIPS 2019 Workshop

Havrylov, S., Kruszewski, G., Joulin, A. Cooperative Learning of Disjoint Syntax and Semantics. // NAACL-HLT 2019 (Oral presentation)

Bražinskas, A., Havrylov, S., Titov, I. Embedding Words as Distributions with a Bayesian Skip-gram Model. // Bayesian Deep Learning NIPS 2016 Workshop and COLING2018 (Oral presentation)

Havrylov, S., Titov, I. Emergence of Language with Multi-agent Games: Learning to Communicate with Sequences of Symbols. // ICLR2017 Workshop track and NIPS2017

Gavrylov S.V. Classifying motion capture sequences using recurrent neural networks // SAIT 2014: System analysis and information technologies, Kyiv, Ukraine

Gavrylov S.V., Drobyshev Y.P. Human motion recognition using recurrent neural networks with fast dropout regularization // IAI 2014: XIV International Conference "Intelligent analysis of information", Kyiv, Ukraine

Volunteering, teaching

Reviewer: *NAACL-HLT 2019*, Machine Learning for NLP area.
NeurIPS 2019 (one of the top 50% highest-scoring reviewers).

Lviv Data Science Summer School 2018 and 2019: lectures on Discrete Computation Graphs

Natural Language Processing 1, University of Amsterdam, Teacher Assistant, Fall term 2016

Summer school "AACIMP-2015": Theano tutorial, lectures on convolutional neural networks and neural language models, project supervisor

Co-organizer and speaker at Kyiv deep learning study group

Projects

Unsupervised constituency parse tree learning for NLP [code, slides]

Quagga – CUDA/Python library that allows multi-GPU utilization by exploiting model parallelism for deep learning architectures [code, documentation]

Project reproduces the model from Show and Tell: A Neural Image Caption Generator [code]

Financial coding of school's budgets and expenditures (5^{th} /50, drivendata) [code, slides]

Applying recurrent neural networks with fast dropout regularization for modeling and classification of human motion (Master's thesis)

Classification of Psychiatric Problems Based on Saccades (2^{nd} award in IJCNN 2012 Competition: International Joint Conference on Neural Networks, Brisbane, Australia)

Development of dynamical visibility algorithm for time series analysis via complex networks, and its application for heart disease classification (Bachelor's thesis)

Completed Trainings and Online Courses

NetCracker's training center (Java SE/EE, Oracle DB)
Probabilistic Graphical Models, Stanford University
Machine Learning, Stanford University
Networked life, University of Pennsylvania
Learning from data, Caltech

Key Skills

Technical skills

Python with data science stack: NumPy, SciPy, Pandas, scikit-learn, PyTorch, TensorFlow, Theano
CUDA C/C++, Java SE, R, MatLab

Languages

English - full professional proficiency
Ukrainian, Russian - native
Italian - elementary level