

# Serhii Havrylov

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<b>Current location</b>	Edinburgh, UK	<b>Github</b>	<a href="https://github.com/serhii-havrylov">github.com/serhii-havrylov</a>
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<b>Website</b>	<a href="https://serhii-havrylov.github.io">serhii-havrylov.github.io</a>	<b>Slideshare</b>	<a href="https://slideshare.net/SergiiGavrylov">slideshare.net/SergiiGavrylov</a>

## Education

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

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

**Sep 2017**

**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

*Havrylov, S., Kruszewski, G., Joulin, A.* Cooperative Learning of Disjoint Syntax and Semantics. // [NAACL-HLT 2019](#)

*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.

Lviv Data Science Summer School 2018: 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

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<sup>th</sup> /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<sup>nd</sup> 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