# Serhii Havrylov

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

#### **Education**

2016 -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

Oct 2013 -Grammarly

Research engineer Apr 2016

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

Sep 2015 -Clashot

Oct 2016 Machine learning consultant

Consulting R&D team on how to build automatic image tagging and description generating sys-

May 2013 -Silver Cup

Oct 2013 Quantitative analyst

Applying machine learning techniques for development and improvement trading strategies.

## **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 ( $5^{th}$  /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<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)

#### **Publications**

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

*Bražinskas, A., Havrylov, S., & Titov, I.* Embedding Words as Distributions with a Bayesian Skip-gram Model. // Bayesian Deep Learning NIPS 2016 Workshop

*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

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

## **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, Theano, TensorFlow, PyTorch CUDA C/C++, Java SE, R, MatLab

#### Languages

English - full professional proficiency Ukrainian, Russian - native