

Egor Lakomkin

Nizzaallee 44a, 52072, Aachen, Germany.

Contact: egor.lakomkin@gmail.com, cell: +49 178 111 80 86

Google Scholar: <https://scholar.google.com/citations?user=Svmv-7EAAAAJ>

Education:

- University of Hamburg, Knowledge Technology Group, 2019, PhD, “Speech and emotion recognition for human-robot interaction”
- Bauman Moscow State Technical University, Master's degree in Computer Science, class of 2011, GPA 4,4 (of 5)

Experience

2022 - today, **Meta MSL**, Aachen, Germany, staff research scientist

- Co-leading speech tokenization design and development as part of Llama 4 Speech full-duplex model pretraining,
- Co-leading reinforcement learning worksteam for Llama 4 Speech full-duplex model, improve factuality, conversational capabilities.

2019 - 2022, **Amazon Alexa**, Aachen, Germany, applied scientist

- Large-scale multi-lingual end-to-end speech recognition models.

2016 – 2019, **University of Hamburg**, PhD student/research associate

- Developed models for emotion and sentiment recognition using acoustic and linguistic information with deep neural networks. Achieved state-of-the-art results by transferring knowledge from deep end-to-end speech recognition network on the IEMOCAP dataset.
- Developed low-latency continuous emotion recognition model with deep reinforcement learning (50% latency reduction with the same level of accuracy).

2018, **Amazon Alexa**, Cambridge, UK, speech scientist intern

- Developed accent recognition model with deep neural networks.

2014 – 2015, **Nanyang Technological University**, researcher

- Developed gene name entity recognition system based on conditional random fields and bi-directional recurrent neural networks. Comparable to the state-of-the-art results on the BioCreative 2 dataset. Used: Python, crfsuite

2013, **DomPharm**, founder and developer

- Developed real-time search engine SaaS for e-commerce websites providing domain-specific spell checking and machine learning-based relevance estimation.
- Developed Android app to find available generics for a particular drug, 40k+ installs, reached top10 application in medical category in Google Play and App Store. Used: Java, Python, ElasticSearch

2011-2012, **InterFinTrade**, developer

- Developed a high-frequency algorithmic trading system operating in less than 10 μ s latency. Used: Java, Netty

2011, **Nanyang Technological University**, research intern

- Developed web service for archiving information about natural disaster events mined from news articles in semantic knowledge graph. Used: Python, OpenCyc, Javascript, SVM

Awards

- 9th place in Konica Minolta Cancer Segmentation challenge <http://bit.ly/2zR6ydi>
- 2nd place in Spoken Language Recognition contest at TopCoder <http://bit.ly/2PbK24q>
- 3rd place in Genpact Email Classification challenge <http://bit.ly/2y0uMk1>
- 3rd place in Harvard Banner Disease Recognition Competition contest at TopCoder
- Apps4Russia contest winner, nomination “Comfortable city”
- Garage48 hackathon winner <http://bit.ly/2P9V1LC>
- HackaPhone 2013 Winner @Mobilefest Moscow
- Higher School of Economics grant “From idea to project” winner
- "My idea for Russia 2012" contest winner

Skills: multimodal large language models, reinforcement learning

Programming languages: Python and familiarity with Java, C++

Languages: English – fluent, German – advanced, Russian – native