MRL 2022

# The 2nd Workshop on Multi-lingual Representation Learning

**Proceedings of the Workshop** 

December 8, 2022

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ISBN 978-1-959429-16-6

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### Keynote Talk: Ev Fedorenko

**Ev Fedorenko** 

Massachusetts Institute of Technology

**Bio:** Ev Fedorenko seeks to understand the cognitive and neural mechanisms that underpin language. This quintessentially human ability allows us to both gain knowledge of the world and to share it with others. Building on Wernicke and Broca's seminal work, Fedorenko has implicated specific brain regions, together comprising the language network, in linguistic processing. She uses a range of approaches, including behavioral analysis, brain imaging (fMRI, ERP, and MEG), genotyping, intracranial recording in patients, and study of neurodevelopmental disorders. Through these methods, Fedorenko is building a picture of the computations and representations that underlie language processing in the human brain. Fedorenko joined the McGovern Institute and MIT in July 2019, having established her lab at Massachusetts General Hospital/ Harvard Medical School in 2014. She earned her PhD in Cognitive Sciences at MIT in 2007, where she also conducted her postdoctoral research.

### Keynote Talk: Kyunghyun Cho

**Kyunghyun Cho** New York University

**Bio:** Kyunghyun Cho is an associate professor of computer science and data science at New York University and CIFAR Fellow of Learning in Machines & Brains. He is also a senior director of frontier research at the Prescient Design team within Genentech Research & Early Development (gRED). He was a research scientist at Facebook AI Research from June 2017 to May 2020 and a postdoctoral fellow at University of Montreal until Summer 2015 under the supervision of Prof. Yoshua Bengio, after receiving PhD and MSc degrees from Aalto University April 2011 and April 2014, respectively, under the supervision of Prof. Juha Karhunen, Dr. Tapani Raiko and Dr. Alexander Ilin. He received an honour of being a recipient of the Samsung Ho-Am Prize in Engineering in 2021. He tries his best to find a balance among machine learning, natural language processing, and life, but almost always fails to do so.

## Keynote Talk: Razvan Pascanu

Razvan Pascanu Deepmind

**Bio:** Razvan Pascanu is a research scientist at DeepMind with research interests including optimization and learning with multiple tasks, graph neural networks, generative models and theory for deep representation and learning networks. He holds a MSc from Jacobs University, Bremen in 2009 and a PhD from University of Montreal (2014), with the supervision of prof. Yoshua Bengio. He was involved in developing Theano and published several papers on topics surrounding the topics of deep learning and deep reinforcement learning.

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#### Program

#### Thursday, December 8, 2022

- 09:00 09:15 *Opening Remarks*
- 09:15 10:00 Oral Session 1
- 10:00 10:30 Shared task session
- 10:30 11:00 *Coffee Break*
- 11:00 12:30 *Poster Session*
- 12:30 14:00 Lunch Break
- 14:00 14:45 Invited Talk by Razvan Pascanu, Deepmind
- 14:45 15:30 Oral Session 2
- 15:30 16:00 *Coffee Break*
- 16:00 16:45 Invited Talk by Kyunghyun Cho, NYU
- 16:45 17:00 Mini Break
- 17:00 17:45 Invited Talk by Ev Fedorenko, MIT
- 17:45 18:00 Closing Remarks