2017 IEEE International Conference on Innovations in Intelligent SysTems and Applications

3-5 July 2017, Gdynia, Poland

PADL 2017

Special Session on Practical Applications of Deep Learning

at the 2017 IEEE International Conference on INnovations in Intelligent SysTems and Applications (INISTA 2017)
Gdynia, Poland, July 3-5, 2017
Conference website: **http://inista.org/**

Special Session Organizers

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Objectives and topics

In the recent years, deep learning methods have emerged as a powerful machine learning method for many fields. Deep learning methods are different from all traditional approaches. They automatically learn features from raw pixels directly and in a fast way more complex models comparing to shallow ones using the manually designed features. During the past several years, deep learning was successfully applied to a lot of computer vision fields such as autonomous vehicles, speech recognition, and medical imaging task. The fundamental of their success lies on powerful parallel computational power of GPUs.

The special session aims to present works relating to the design and use of deep learning in practical applications. This special session exhibits the number of trends and the challenges of the use of deep learning methods in practical applications. In addition, it is expected to gather software developers, specialist researchers and users from diverse fields.

The scope of the PADL 2017 includes, but is not limited to the following topics:

- Emerging applications of deep learning such as self-driving cars, speech recognition, face recognition, and medical imaging;
- Application of deep learning in data representation and analysis, including recognition, understanding, detection, segmentation, retrieval, restoration, super-resolution, and compression;
- Distributed computing, GPUs and new hardware for deep learning research;
- Deep learning algorithms and applications including usage the combinations of FPGA, CPU, and GPU;
- Comparisons of FPGA, CPU, and GPU;
- Deep learning model selection;
- Deep learning software frameworks based on CUDA and GPU such as Digit, Python, Matlab, Deeplearning4j, Torch, Theano, TensorFlow, Caffe, Paddle, MxNet, and Keras for applications;
- Deep learning hardware architecture for applications;
- Deep learning algorithms applicable on large-scale data;
- Deep learning on mobile platform.

Important dates

Submission of papers: **1 March 2017**
Notification of acceptance: **15 April 2017**
Camera-ready papers: **30 April 2017**
Registration & payment: **15 May 2017**
Conference date: **3-5 July 2017**

Program Committee (to be invited)

Submission

All contributions should be original and not published elsewhere or intended to be published during the review period. Authors are invited to submit their papers electronically in pdf format, through EasyChair. All the special sessions are centralized as tracks in the same conference management system as the regular papers. Therefore, to submit a paper please activate the following link and select the track: ***PADL 2017: Special Session on Practical Applications of Deep Learning:*** **https://easychair.org/conferences/?conf=inista2017**

Paper format: Papers must be prepared using **IEEE templates for conference proceedings.**

Page limit: The maximum page limit is 6 inclusive of figures and tables. INISTA will offer the option to buy limited number of extra pages for submission.

Language: The official language for the conference is English. Less than satisfactory English usage may form the sole basis for rejection of a paper and omission of any such final paper version from the conference proceedings. Authors whose native language is not English are encouraged to check their papers for proper English spelling and grammar using tools such as English grammar checkers available with most word processing application software. Alternatively, proofreading support from a native English-speaking colleague or technical editor may suffice. Some authors may be interested in the paid service available at the following link: **http://www.prof-editing.com/ieee/** for the final version of the paper