



MindSpore

MindSpore TSC Meeting

Jan 21 2021



MindSpore

Antitrust Policy Notice

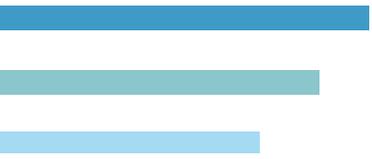
- MindSpore community meetings involve participation by industry competitors, and it is the intention of the MindSpore community to conduct all of its activities in accordance with applicable antitrust and competition laws. It is therefore extremely important that attendees adhere to meeting agendas, and be aware of, and not participate in, any activities that are prohibited under applicable antitrust and competition laws in the member representative's nation or state.



MindSpore

MindSpore Useful Information

- Web site: www.mindspore.cn (Chinese/English Display)
- Gitee: gitee.com/mindspore GitHub: github.com/mindspore-ai
iHub: <https://code.ihub.org.cn/companies/4vioxkz2>
- Mail Lists: <https://mailweb.mindspore.cn/postorius/lists/mindspore-tsc.mindspore.cn/>
- Logo:
 - ❑ <https://gitee.com/mindspore/community/blob/master/MindSpore-logo.png>
 - ❑ <https://github.com/mindspore-ai/community/blob/master/MindSpore-logo.png>
- Presentation Template:
 - ❑ <https://gitee.com/mindspore/community/tree/master/slides>
 - ❑ <https://github.com/mindspore-ai/community/tree/master/slides>
- Charter:
 - ❑ <https://gitee.com/mindspore/community/blob/master/governance.md>
 - ❑ <https://github.com/mindspore-ai/community/blob/master/governance.md>



Agenda

- Roll Call and Approval for previous minutes
- Community Progress Update
- SIG/WG Update
- Release Review
- Operational Matters



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Roll Call
(First name alphabetically ordered)



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<u>Affiliation</u>	<u>TSC Member</u>
University of Edinburgh	Amos Storkey
Conic AI Technology	Han Xiao
ICBC's Big Data and Artificial Intelligence Lab	Jianjun Chen
Tsinghua University	Jun Zhu
University Paris-Sacla	Joel Falcou
Apulis Technology	Jin Li
Huawei	Lei Chen (Chair)
Xidian University	Maoguo Gong
Imperial College London	Peter Pietzuch
Key Lab of Intelligent Information Processing of the Institute of Computing Technology (ICT), Chinese Academy of Sciences (CAS)	Shiguang Shan
University of Muenster	Sergei Gorlatch
Harbin Institute of Technology	Tonghua Su
University of Science and Technology of China	Xiangyang Li
Peking University/Pengcheng Lab	Yonghong Tian



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Approval of previous minute

- All the meeting notes and slides could be found at
 - ❑ <https://github.com/mindspore-ai/community/tree/master/tsc/meeting-notes>
 - ❑ <https://github.com/mindspore-ai/community/tree/master/tsc/slides>
- Dec 2020 TSC meeting recording:
 - ❑ <https://www.bilibili.com/video/BV1qV411h7an>

Community Progress Update



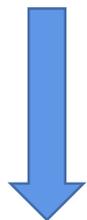


MindSpore

Community Progress Update

Iterations:

MindSpore 0.1.0-alpha



10 versions

MindSpore 1.1.0

Networks:

Model Zoo official: 58 networks

Research: 14+ networks in doing

https://www.mindspore.cn/doc/note/en/r1.1/network_list_ms.html

Operators:

MindSpore.nn operators: 130+

https://www.mindspore.cn/doc/api_python/en/r1.1/mindspore/mindspore.nn.html

MindSpore.ops operators: 300+

https://www.mindspore.cn/doc/api_python/en/r1.1/mindspore/mindspore.ops.html



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Community Progress Update

adactivetraining

akg

compiler

data

executor

frontend

graphengine

mdp

modelzoo

mslite

parallel

security

serving

visualization

14 SIGs

mep-adaptive

mep-ai4earth

mep-akg

mep-gnn

mep-mm

mep-mslite

mep-parallel

mep-quantum

mep-research

mep-serving

10 MEPs

ai4earth

doc

mm

quantum

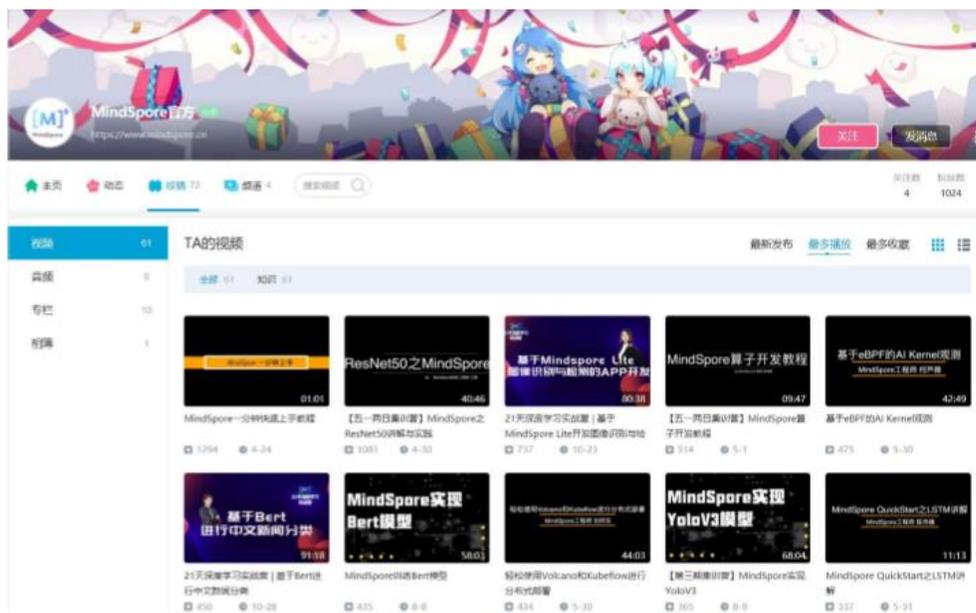
research

5 WGs

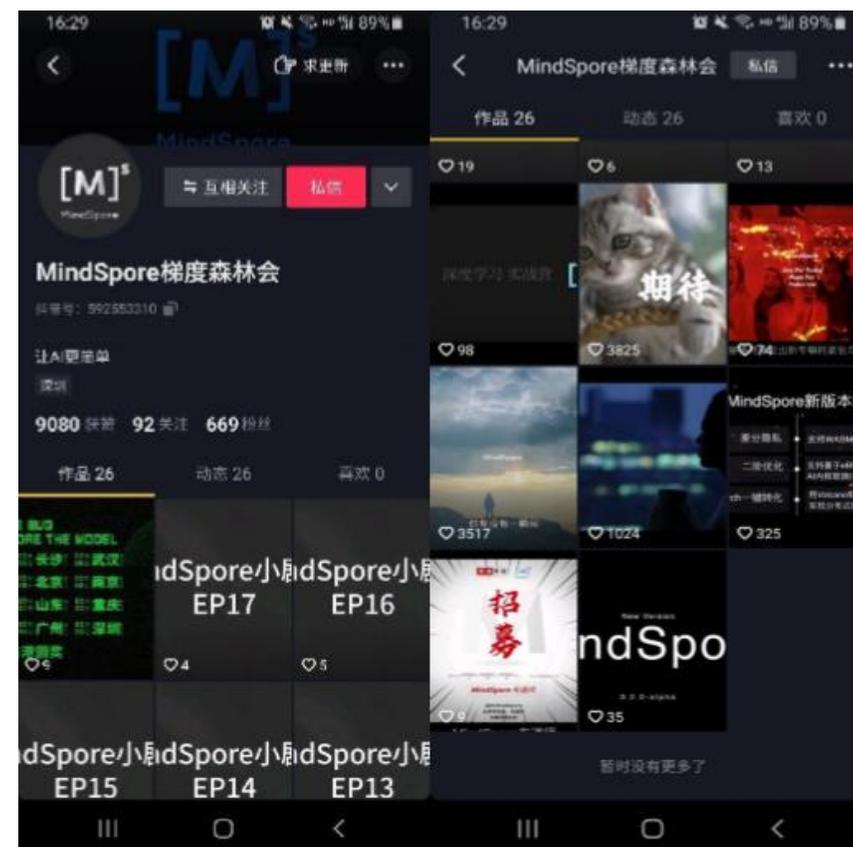


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Community Progress Update



Bilibili: 65 videos



Tiktok: 38 videos

Community Progress Update



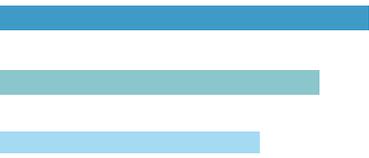
2 days Training camp



21 Days Tutorial

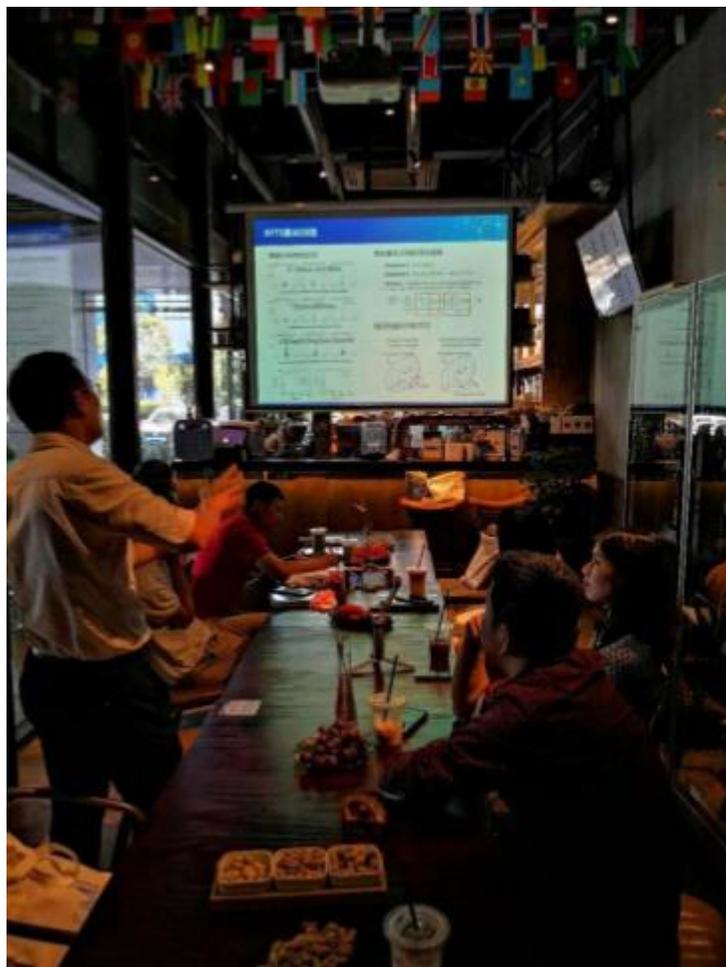


MindCon



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Community Progress Update



MindSpore Study Group

MSG

Техническое глубокое погружение
Хакерский мозговой штурм
Участие в сообществе

[Россия]
2020.09.17 10:00 am

Speech topic
TVM and Auto Kernel Generator in MindSpore
Focusing on new computing runtimes, research
the community operation of MindSpore AI framework

Leon Wang
Open Source Engineer in Huawei

Former Director of Open(VINO Toolkit) at Intel
Director of AI technology development at Huawei
Nizhny Novgorod research institute

MSG Russia Organizer **Slavuta Ilya**

Conference link:
<https://weblink-meeting.zoom.us/j/545888834>

MindSpore Study Group Indonesia

Huawei MindSpore
All-Scenario AI Computing
Framework

MSG Indonesia

Public group · 16 members

About Discussion Members Events Media

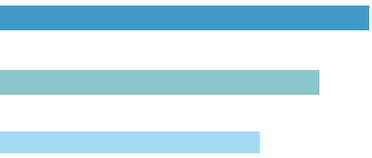
Cancel Request

New Activity

Suryadiputra Liawatimena
1h · ...
Ascend AI Processor Architecture and Programming: Principles and

About

MindSpore Study Group (MSG) Indonesia is a Facebook Group for learning and implementing about The Huawei MindSpore, All-Scenario AI Computing Er... See More

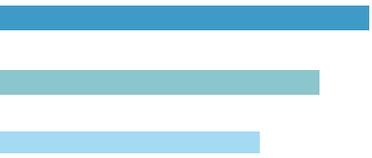


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SIGs/WGs Update

Earth System Modeling

- Working-Groups: <https://gitee.com/mindspore/community/tree/master/working-groups/ai4earth>
- MEP: <https://gitee.com/mindspore/community/tree/master/design/meps/mep-ai4earth>



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SIGs/WGs Update

Quantum Computing

- Working-Groups: <https://gitee.com/mindspore/community/tree/master/working-groups/quantum>
- MEP: <https://gitee.com/mindspore/community/tree/master/design/meps/mep-quantum>



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Release Review

MindSpore 1.1.0:

<https://gitee.com/mindspore/mindspore/blob/master/RELEASE.md>

MindSpore

- **Major Features and Improvements**
 - **NewModels:** GNMT v2, MaskRCNN, Yolov4, Openpose etc.
 - **FrontEnd:** interface changes, checkpoint features etc.
 - **Auto Parallel:** support more functions and operators in both GPU and Ascend
 - **Executor:** ResNet50 and Dynamic shape for GPU etc.
 - **MDP:** added new operators, distribution strategies and optimizers for Ascend and GPU
 - **DataSet:** support GPU profiling, cache data sharing etc.
- **API Change**
 - **Backwards Incompatible Change:** Python API in Optimizer, export etc.
- **Bug fixes**
 - **FrontEnd:** some control flow problem in Ascend and GPU
 - **Auto Parallel:** resolve some restrictions
 - **Executor:** fix some compilation and pynative mode error
 - **Dataset**



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Release Review

MindSpore Lite

- **Major Features and Improvements**
 - **Converter and runtime:** support dynamic shape, more operators and fusions etc.
 - **CPU backend optimization:** add 50+ new operators, enhanced performance on arm v8.2 platform.
 - **OpenCL backend:** add 10+ new operators, total 58 ops, and more optimizations.
 - **Post quantization:** support both weight quantization and full quantization.
 - **Training on Device**
- **API Change**
 - **API Incompatible Change**
 - C++ API
 - Java API
 - **Deprecations**
 - C++ API
- **Bug fixes**

Next Step

- Technical Plans: GPT3, GNN, federated learning etc.
- AIIA, OpenI community, LFAI & Data
- Community progress
- etc.



THANK YOU

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