# How to contribute a research paper code implementation

"help wanted:paper implementation" issues 6 open

We encourage researchers to publish new state-of-the-art machine learning models to the TensorFlow Model Garden.

To contribute a new research paper code, please provide your plans using GitHub issues in this repository before making any pull requests.

## Requirements

We want to ensure research code implementations from contributors are high-quality and well-documented.

Your contributions must meet the following requirements to be accepted to the TensorFlow Model Garden repository.

Directory	Requirements
<u>official</u>	<ul> <li>Provide a model implemented in TensorFlow 2</li> <li>Use the modelling libraries provided by the Model Garden</li> <li>Provide baseline results</li> <li>Support distributed training on GPUs <i>and</i> TPUs</li> <li>Reasonable performance on GPUs <i>and</i> TPUs</li> <li>Need a SLA (Service Level Agreement) for community support</li> <li>Pass the TensorFlow code usability review process</li> </ul>
<u>research</u>	<ul> <li>Provide a model implemented in TensorFlow 2</li> <li>Use the modelling libraries provided by the Model Garden for supported ML tasks</li> <li>Provide baseline results</li> <li>Reasonable performance on GPUs or TPUs</li> <li>Need a SLA (Service Level Agreement) for community support</li> </ul>
<u>community</u>	Models implemented in TensorFlow 2 by external contributors     Reproduce the paper results

#### **Model selection**

- A model from the paper accepted at top machine learning venues or
- A state-of-the-art model from a pre-publication available at <a href="mailto:arXiv">arXiv</a>

#### Model accuracy and performance

- Should be able to reproduce the same results in a published paper
- Should provide reasonable out-of-box performance
  - Should have accuracy and performance test results on GPUs or TPUs

#### **Pre-trained models**

Pre-trained models in TensorFlow SavedModel format should be published to <u>TensorFlow Hub</u>.

### **Documentation**

- Use the <u>README template</u> that describes the information required for publishing a new code implementation.
- We also recommend to use Read the Docs for hosting documentation.
  - Documentation can be automatically generated from your repository.
  - Please see <u>Read the Docs Template</u>.

Note: Exceptions can be made case by case basis.