ibm-granite / **granite-tsfm** Public

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wgifford Merge pull request #432 from ChernovAndrey/main   ⬚   ✕

b629ba4 · 14 hours ago   ⏱ 2,061 Commits

📁 .github	ditch poetry-dynamic-versioning	2 days ago
📁 .vscode	pytest just looks at services/inf…	4 days ago
📁 notebooks	Merge branch 'main' into conf…	last week
📁 scripts	use ruff	last year
📁 services	cve	16 hours ago
📁 tests	Merge pull request #429 from i…	20 hours ago
📁 tsfm_public	Merge remote-tracking branch…	15 hours ago
📁 tsfmhfdemos	ruff	9 months ago
📄 .gitignore	ignore checkpoint files	last year
📄 .isort.cfg	isort	2 years ago
📄 .whitesource	Add .whitesource configuration…	4 months ago
📄 LICENSE	Initial commit	2 years ago
📄 Makefile	include services in style, format	last year
📄 README.md	ditch python 3.9 as it's EOL at …	4 days ago
📄 pyproject.toml	pin to 4.56.0 for now	2 days ago
📄 pytest.ini	ignore some during test discov…	8 months ago
📄 wiki.md	minor edits	8 months ago

About

Foundation Models for Time Series

📖 Readme
⚖ Apache-2.0 license
⌁ Activity
▣ Custom properties
☆ 702 stars
⊙ 17 watching
⑂ 248 forks

Report repository

Releases 31

🏷 **v0.3.1** (Latest)
on Jun 30

+ 30 releases

Packages

No packages published

Contributors 27

+ 13 contributors

Languages

● Jupyter Notebook 90.0%
● Python 9.9%
● Other 0.1%

TSFM: Time Series Foundation Models

Public notebooks, utilities, and serving components for working with Time Series Foundation Models (TSFM).

The core TSFM time series models have been made available on Hugging Face -- details can be found here. Information on the services component can be found here.

Python Version

The current Python versions supported are 3.10, 3.11, 3.12.

Initial Setup

First clone the repository:

```
git clone "https://github.com/ibm-granite/granite-tsfm.git"
cd granite-tsfm
```

📕 Notebooks Installation

Several notebooks are provided in the `notebooks` folder. They allow you to perform pre-training and finetuning on the models. To install use `pip`:

```
pip install ".[notebooks]"
```

🔗 Links to the notebooks

- Getting started with `PatchTSMixer` [Try it out]
- Transfer learning with `PatchTSMixer` [Try it out]
- Transfer learning with `PatchTST` [Try it out]
- Getting started with `TinyTimeMixer (TTM)` [Try it out]
- `TTM` full benchmarking scripts and results are available [here]

🔗 📗 Google Colab Tutorials

Run the TTM tutorial in Google Colab, and quickly build a forecasting application with the pre-trained TSFM models.

- [TTM Colab Tutorial](#)

💻 Demos Installation

The demo presented at NeurIPS 2023 is available in `tsfmhfdemos`. This demo requires you to have pre-trained and finetuned models in place (we plan to release these at a later date). To install

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📖 README   ⚖️ Apache-2.0 license

```
pip install ".[demos]"
```

🐛 Issues

If you encounter an issue with this project, you are welcome to submit a [bug report](#). Before opening a new issue, please search for similar issues. It's possible that someone has already reported it.

🌐 Wiki

[Wiki Page](#)

Notice

The intention of this repository is to make it easier to use and demonstrate Granite TimeSeries components that have been made available in the [Hugging Face transformers library](#). As we continue to develop these capabilities we will update the code here.

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