sockeye Documentation

Release stable

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CONTENTS

Sockeye

[![PyPI version](https://badge.fury.io/py/sockeye.svg){}](https://badge.fury.io/py/sockeye) [![GitHub license](https://img.shields.io/github/license/awslabs/sockeye.svg){}](https://github.com/awslabs/sockeye/blob/main/LICENSE) [![GitHub issues](https://img.shields.io/github/issues/awslabs/sockeye.svg){}](https://github.com/awslabs/sockeye/issues) [![Documentation Status](https://readthedocs.org/projects/sockeye/badge/?version=latest){}](http://sockeye.readthedocs.io/en/latest/?badge=latest) [![Torch Nightly](https://github.com/awslabs/sockeye/actions/workflows/torch_nightly.yml/badge.svg){}](https://github.com/awslabs/sockeye/actions/workflows/torch_nightly.yml)

Sockeye is an open-source sequence-to-sequence framework for Neural Machine Translation built on [PyTorch](https://pytorch.org/). It implements distributed training and optimized inference for state-of-the-art models, powering [Amazon Translate](https://aws.amazon.com/translate/) and other MT applications.

Recent developments and changes are tracked in our [CHANGELOG](https://github.com/awslabs/sockeye/blob/main/CHANGELOG.md).

For a quickstart guide to training a standard NMT model on any size of data, see the [WMT 2014 English-German tutorial](https://awslabs.github.io/sockeye/tutorials/wmt_large.html).

If you are interested in collaborating or have any questions, please submit a pull request or [issue](https://github.com/awslabs/sockeye/issues/new). You can also send questions to *sockeye-dev-at-amazon-dot-com*. Developers may be interested in [our developer guidelines](development.md).

Citation

For more information about Sockeye, see our papers ([BibTeX](sockeye.bib)).

Sockeye 3.x

> Felix Hieber, Michael Denkowski, Tobias Domhan, Barbara Darques Barros, Celina Dong Ye, Xing Niu, Cuong Hoang, Ke Tran, Benjamin Hsu, Maria Nadejde, Surafel Lakew, Prashant Mathur, Anna Currey, Marcello Federico. > [Sockeye 3: Fast Neural Machine Translation with PyTorch](https://arxiv.org/abs/2207.05851). ArXiv e-prints.

Sockeye 2.x

> Tobias Domhan, Michael Denkowski, David Vilar, Xing Niu, Felix Hieber, Kenneth Heafield. > [The Sockeye 2 Neural Machine Translation Toolkit at AMTA 2020](https://www.aclweb.org/anthology/2020.amta-research.10/). Proceedings of the 14th Conference of the Association for Machine Translation in the Americas (AMTA'20).

> Felix Hieber, Tobias Domhan, Michael Denkowski, David Vilar. > [Sockeye 2: A Toolkit for Neural Machine Translation](https://www.amazon.science/publications/sockeye-2-a-toolkit-for-neural-machine-translation). Proceedings of the 22nd Annual Conference of the European Association for Machine Translation, Project Track (EAMT'20).

Sockeye 1.x

> Felix Hieber, Tobias Domhan, Michael Denkowski, David Vilar, Artem Sokolov, Ann Clifton, Matt Post. > [The Sockeye Neural Machine Translation Toolkit at AMTA 2018](https://www.aclweb.org/anthology/W18-1820/). Proceedings of the 13th Conference of the Association for Machine Translation in the Americas (AMTA'18). > > Felix Hieber, Tobias Domhan, Michael Denkowski, David Vilar, Artem Sokolov, Ann Clifton and Matt Post. 2017. > [Sockeye: A Toolkit for Neural Machine Translation](https://arxiv.org/abs/1712.05690). ArXiv e-prints.