Resource Summary Report

Generated by FDI Lab - SciCrunch.org on Apr 11, 2025

DeepNano

RRID:SCR_016070
Type: Tool

Proper Citation

DeepNano (RRID:SCR_016070)

Resource Information

URL: https://bitbucket.org/vboza/deepnano

Proper Citation: DeepNano (RRID:SCR_016070)

Description: Software for an alternative basecaller for DNA base calling in the portable Oxford Nanopore MinION sequencing device, based on deep recurrent neural networks. Used to improve base calling accuracy and reduce sequencing error rate.

Synonyms: DeepNano: Deep recurrent neural networks for base calling in MinION nanopore reads, DeepNano: alternative basecaller for MinION reads

Resource Type: data processing software, sequence analysis software, software application, software resource, data analysis software

Defining Citation: PMID:28582401

Keywords: DNA, basecaller, Oxford Nanopore MinON read, sequencing, device, deep, recurrent, neural, network, accuracy, reduce, error

Funding: VEGA 1/0684/16 (BB);
VEGA 1/0719/14 (TV);
Slovak Research and Development Agency APVV-14-0253;
NVIDIA Corporation

Availability: Free, Available for download

Resource Name: DeepNano

Resource ID: SCR_016070

Alternate IDs: OMICS_14561

Alternate URLs: http://compbio.fmph.uniba.sk/deepnano/, https://sources.debian.org/src/deepnano/

License URLs: https://bitbucket.org/vboza/deepnano/src/e8a621e17b9fb73c261e6ca041976440812bc75f/LICENSE?at view-default

Record Creation Time: 20220129T080328+0000

Record Last Update: 20250411T055841+0000

Ratings and Alerts

No rating or validation information has been found for DeepNano.

No alerts have been found for DeepNano.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 4 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Konishi H, et al. (2021) Halcyon: an accurate basecaller exploiting an encoder-decoder model with monotonic attention. Bioinformatics (Oxford, England), 37(9), 1211.

Santos A, et al. (2020) Computational methods for 16S metabarcoding studies using Nanopore sequencing data. Computational and structural biotechnology journal, 18, 296.

Patel A, et al. (2018) MinION rapid sequencing: Review of potential applications in neurosurgery. Surgical neurology international, 9, 157.

Yang C, et al. (2017) NanoSim: nanopore sequence read simulator based on statistical characterization. GigaScience, 6(4), 1.