

## Documentation

**class** NanopolishOutputData.**NanopolishOutputData** (*path*)

Interface to nanopolish output data. Takes a path to protobuf serialized nanopolish output data and offers methods for data retrieval.

**get\_event\_align** (*position*, *read\_index=0*)

Raises a KeyError if (*position*, *read\_index*) does not exist in data. The default value for *Read\_index* is 0 for convenience. E.g. if someone is working with only one reference contig read.

**position: int** Position in reference read.

**read\_index: int** Index of the contig, because the reference can consist of multiple contigs.

event\_align: object

**get\_events** (*position*, *read\_index=0*)

**get\_line** (*line\_number*)

Method works in  $O(\log n)$  where  $n$  is number of event\_aligns. If you want to iterate through lines in linear time, don't use this method.

line\_number: int

**(event\_align, event):** A tuple consisting of an event\_align object (which generally has more events) and a specific event on given line. The returned event can be also found as an element of event\_align.events.

**get\_line\_cnt** ()

Returns the number of lines in the original nanopolish text output.

**get\_model** (*position*, *read\_index=0*)

**position: int** Position in reference read.

**read\_index: int** Index of the contig, because the reference can consist of multiple contigs.

(model\_kmer, model\_mean, model\_stdv)

**get\_reference\_kmer** (*position*, *read\_index=0*)

**class** NanopolishOutputParser.**NanopolishOutputParser** (*path*)

Nanopolish txt output parser, produces protobuf serialization if the 'serialize' method is called.

**serialize** (*path*)

Writes the protobuf serialization string into the given file. Data is sorted by pairs (*read\_index*, *position*).

**path: string** Path to the file where serialized string of data should be written.