

**NAME**

sacabench – manual page for sacabench 1.0

**SYNOPSIS**

**sacabench** [*OPTIONS*] *SUBCOMMAND*

**DESCRIPTION**

CLI for SACABench.

**OPTIONS**

**-h, --help**

Print this help message and exit

**Subcommands:**

**list** List all implemented algorithms.

**construct**

Construct a SA.

**demo** Run all algorithms on an example string.

**batch** Measure runtime and memory usage for all algorithms.

**plot** Plot measurements.

**SEE ALSO**

**sacabench list(1), sacabench construct(1), sacabench demo(1), sacabench batch(1), sacabench plot(1)**

**NAME**

sacabench list – manual page for sacabench list 1.0

**SYNOPSIS**

**sacabench** *list* [*OPTIONS*]

**DESCRIPTION**

List all implemented algorithms.

**OPTIONS**

- h,--help**  
Print this help message and exit
- n,--no-description**  
Don't show a description for each algorithm.
- j,--json**  
Output list as an json array

**SEE ALSO**

**sacabench**(1)

**NAME**

sacabench construct – manual page for sacabench construct 1.0

**SYNOPSIS**

**sacabench** *construct* [*OPTIONS*] *algorithm input*

**DESCRIPTION**

Construct a SA.

**Positionals:**

*algorithm* TEXT REQUIRED

Which algorithm to run.

*input* TEXT REQUIRED

Path to input file, or – for STDIN.

**OPTIONS**

**-h,--help**

Print this help message and exit

**--config** TEXT

Read an config file for CLI args

**-c,--check**

Check the constructed SA.

**-q,--fastcheck**

Check the constructed SA with a faster, parallel algorithm.

**-b,--benchmark** TEXT

Record benchmark and output as JSON. Takes path to output file, or – for STDOUT

**-J,--json** TEXT

Output SA as JSON array. Takes path to output file, or – for STDOUT.

**-B,--binary** TEXT

Output SA as binary array of unsigned integers, with a 1 Byte header describing the number of bits used for each integer. Takes path to output file, or – for STDOUT.

**-F,--fixed** UINT Needs: **--binary**

Elide the header, and output a fixed number of bits per SA entry

**-p,--prefix** TEXT

Calculate SA of prefix of size TEXT.

**-f,--force**

Overwrite existing files instead of raising an error.

**-m,--minimum\_sa\_bits** UINT=32

The lower bound of bits to use per SA entry during construction

**-r,--repetitions** UINT=1

The value indicates the number of times the SACA(s) will run. A larger number will possibly yield more accurate results

**-z,--rplot** Needs: **--benchmark**

Plots measurements with R.

**--latexplot** Needs: **--benchmark**

Plots measurements with LaTeX and SqlPlotTools.

**-s,--sysinfo** Needs: **--benchmark**

Add system information to benchmark output.

**SEE ALSO**

**sacabench(1)**

**NAME**

sacabench batch – manual page for sacabench batch 1.0

**SYNOPSIS**

**sacabench** *batch* [*OPTIONS*] *input*

**DESCRIPTION**

Measure runtime and memory usage for all algorithms.

**Positionals:**

*input* TEXT REQUIRED

Path to input file, or – for STDIN.

**OPTIONS**

**-h,--help**

Print this help message and exit

**--config** TEXT

Read an config file for CLI args

**-c,--check**

Check the constructed SA.

**-q,--fastcheck**

Check the constructed SA with a faster, parallel algorithm.

**-b,--benchmark** TEXT

Record benchmark and output as JSON. Takes path to output file, or – for STDOUT

**-f,--force**

Overwrite existing files instead of raising an error.

**-m,--minimum\_sa\_bits** UINT=32

The lower bound of bits to use per SA entry during construction

**-p,--prefix** TEXT

calculate SA of prefix of input.

**-r,--repetitions** UINT=1

The value indicates the number of times the SACA(s) will run. A larger number will possibly yield more accurate results

**--whitelist** TEXT ... Excludes: **--blacklist**

Execute only specific algorithms

**--blacklist** TEXT ... Excludes: **--whitelist**

Blacklist algorithms from execution

**-z,--rplot** Needs: **--benchmark**

Plots measurements with R.

**--latexplot** Needs: **--benchmark**

Plots measurements with LaTeX and SqlPlotTools.

**-s,--sysinfo** Needs: **--benchmark**

Add system information to benchmark output.

**SEE ALSO**

**sacabench**(1)

**NAME**

sacabench demo – manual page for sacabench demo 1.0

**SYNOPSIS**

**sacabench** *demo* [*OPTIONS*]

**DESCRIPTION**

Run all algorithms on an example string.

**OPTIONS**

**-h, --help**

Print this help message and exit

**SEE ALSO**

**sacabench(1)**

**NAME**

sacabench plot – manual page for sacabench plot 1.0

**SYNOPSIS**

**sacabench** *plot* [*OPTIONS*] *benchmark\_file*

**DESCRIPTION**

Plot measurements.

**Positionals:**

*benchmark\_file* TEXT REQUIRED

Path to benchmark json file.

**OPTIONS**

**-h, --help**

Print this help message and exit

**SEE ALSO**

**sacabench**(1)