
detect_{*s*}*imd*

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Detect-SIMD is a lightweight Python library implementing a single function `detect` which detects the SIMD capabilities of the user's CPU/OS. This is useful for building vectorized packages.

`detect_simd.detect()` → dict
Detect CPU SIMD Capabilities.

Returns Dictionary containing each SIMD instruction set. Each instruction set maps to either a 0 or a 1 indicating if it is supported by the user's computer.

Return type dict

Detectable SIMD Instruction Sets

- MMX
- x64
- ABM
- RDRAND
- BMI1
- BMI2
- ADX
- PREFETCHWT1
- SSE
- SSE2
- SSE3
- SSSE3
- SSE41
- SSE42
- SSE4a
- AES
- SHA
- AVX
- XOP
- FMA3
- FMA4
- AVX2

- AVX512F
- AVX512CD
- AVX512PF
- AVX512ER
- AVX512VL
- AVX512BW
- AVX512DQ
- AVX512IFMA
- AVX512VBMI

CHAPTER 3

Issue Tracking and Feature Requests

- Report issues and request features on our [GitHub](#).

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`detect_simd.detect()` (*built-in function*), [3](#)