API Collection

Vector summation

Sum the values in a vector.

Topics

Vector Summation

`static func sum<U>(U) -> Double`

Returns the double-precision vector sum.

`static func sum<U>(U) -> Float`

Returns the single-precision vector sum.

`static func sumAndSumOfSquares<U>(U) -> (elementsSum: Double, squaresSum: Double)`

Returns the double-precision vector sum and sum of squares.

`static func sumAndSumOfSquares<U>(U) -> (elementsSum: Float, squaresSum: Float)`

Returns the single-precision vector sum and sum of squares.

`static func sumOfMagnitudes<U>(U) -> Double`

Returns the double-precision vector sum of magnitudes.

`static func sumOfMagnitudes<U>(U) -> Float`

Returns the single-precision vector sum of magnitudes.

`static func sumOfSquares<U>(U) -> Double`

Returns the double-precision vector sum of squares.

`static func sumOfSquares<U>(U) -> Float`

Returns the single-precision vector sum of squares.

`vDSP_sve`

Calculates the sum of values in a single-precision vector.

`vDSP_sveD`

Calculates the sum of values in a double-precision vector.

`vDSP_svemg`

Calculates the sum of magnitudes in a single-precision vector.

`vDSP_svemgD`

Calculates the sum of magnitudes in a double-precision vector.

`vDSP_svesq`

Calculates the sum of squares in a single-precision vector.

`vDSP_svesqD`

Calculates the sum of squares in a double-precision vector.

`vDSP_sve_svesq`

Calculates the sum of values and the sum of squares in a single-precision vector.

`vDSP_sve_svesqD`

Calculates the sum of values and the sum of squares in a double-precision vector.

`vDSP_svs`

Calculates the sum of signed squares in a single-precision vector.

`vDSP_svsD`

Calculates the sum of signed squares in a double-precision vector.

See Also

Vector reduction

Vector extrema calculation

Calculate the minimum and maximum values in a vector.

Vector average calculation

Calculate the average value in a vector.