API Collection

Vector average calculation

Calculate the average value in a vector.

Topics

Calculating the mean value of a vector

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

Returns the mean value of a single-precision vector.

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

Returns the mean value of a double-precision vector.

`vDSP_meanv`

Calculates the mean value of a single-precision vector.

`vDSP_meanvD`

Calculates the mean value of a double-precision vector.

Calculating the mean of magnitudes of a vector

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

Returns the mean of magnitudes of a single-precision vector.

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

Returns the mean of magnitudes of a double-precision vector.

`vDSP_meamgv`

Calculates the mean of magnitudes of a single-precision vector.

`vDSP_meamgvD`

Calculates the mean of magnitudes of a double-precision vector.

Calculating the mean of squares of a vector

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

Returns the mean of squares of a single-precision vector.

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

Returns the mean of squares of a double-precision vector.

`vDSP_measqv`

Calculates the mean of squares of a single-precision vector.

`vDSP_measqvD`

Calculates the mean of squares of a double-precision vector.

`vDSP_mvessq`

Calculates the mean of signed squares of a single-precision vector.

`vDSP_mvessqD`

Calculates the mean of signed squares of a double-precision vector.

Calculating the root mean square of a vector

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

Returns the root mean square of a single-precision vector.

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

Returns the root mean square of a double-precision vector.

`vDSP_rmsqv`

Calculates the root mean square of a single-precision vector.

`vDSP_rmsqvD`

Calculates the root mean square of a double-precision vector.

See Also

Vector reduction

- Vector extrema calculation

  Calculate the minimum and maximum values in a vector.

- Vector summation

  Sum the values in a vector.