# computeAlphaWeights

Computes alpha weights from feature space product HT\*beta and target vector y as porduct with inverse covariance matrix with additive noise Ky^-1 represented by its cholesky decomposed lower triangle matrix L. Ky^-1 \* (y - m(x)).

#### **Syntax**

```
alpha = computeAlphaWeights(L, y, m)
```

#### **Description**

alpha = computeAlphaWeights(L, y, m) prepare data and forward it to matrix computation.

## **Input Argurments**

L lower triangle matrix of cholesky decomposed K matrix.

y regression target vector.

m regression mean vector.

#### **Output Argurments**

alpha regression weights.

## Requirements

- Other m-files required: None
- Subfunctions: computeInverseMatrixProduct
- MAT-files required: None

## See Also

- decomposeChol
- computeInverseMatrixProduct
- initKernelParameters

Created on November 06. 2019 by Klaus Jünemann. Copyright Klaus Jünemann 2019.

```
function alpha = computeAlphaWeights(L, y, m)
  % get residual
  residual = y - m;
  % L and residual is validated in computation below, get weights
  alpha = computeInverseMatrixProduct(L, residual);
end
```

Published with MATLAB® R2020b