

# Classical Gram-Schmidt

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1: for  $j = 1$  to  $n$  do  
2:    $u_j = a_j$   
3:   for  $i = 1$  to  $j - 1$  do  
4:      $r_{ij} = q_i^* a_j$   
5:      $u_j = u_j - r_{ij} q_i$   
6:   end for  
7:    $r_{jj} = ||u_j||_2$   
8:    $q_j = u_j / r_{jj}$   
9: end for
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