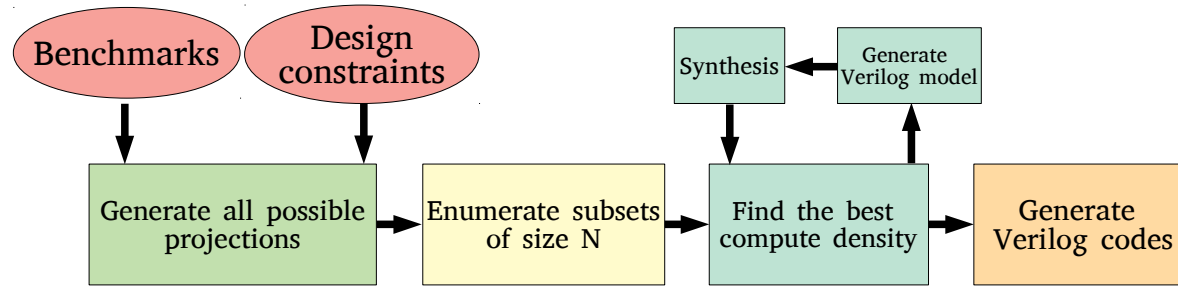
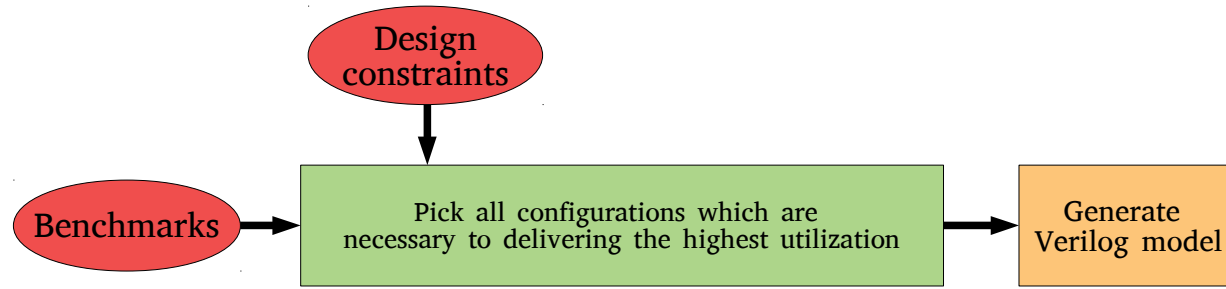


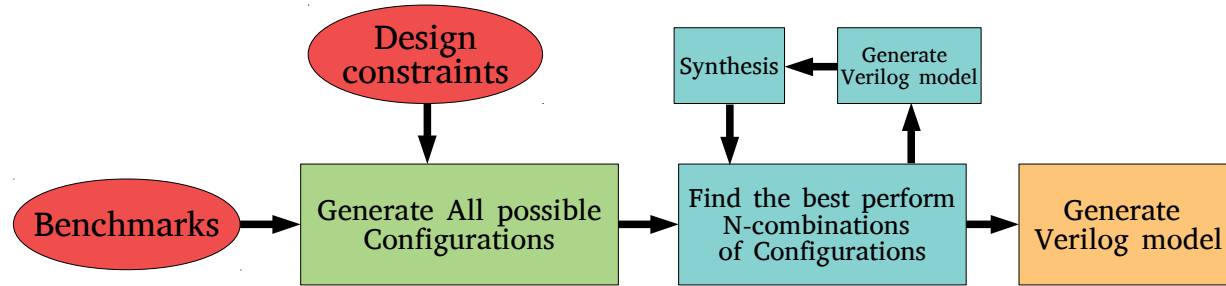
a) Heuristic



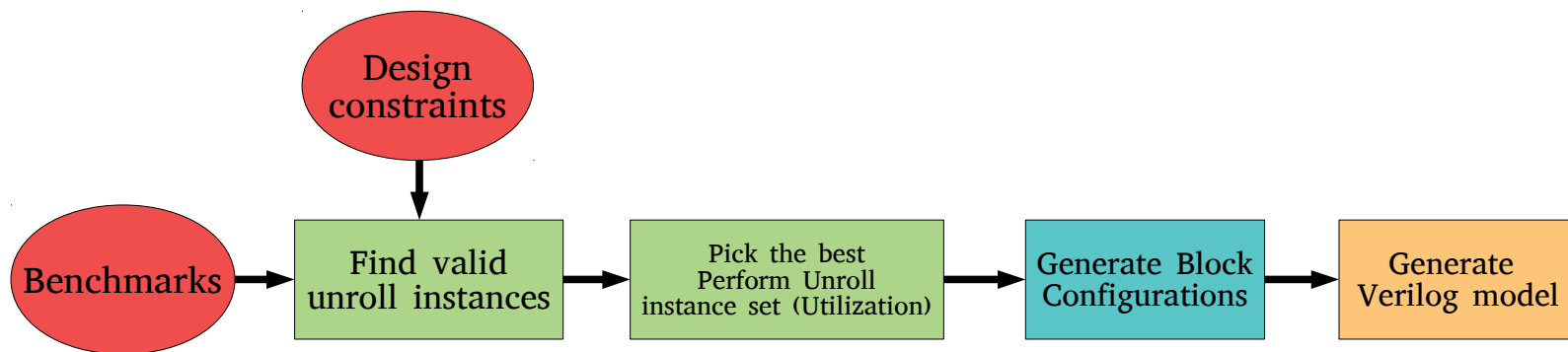
b) N-Config search



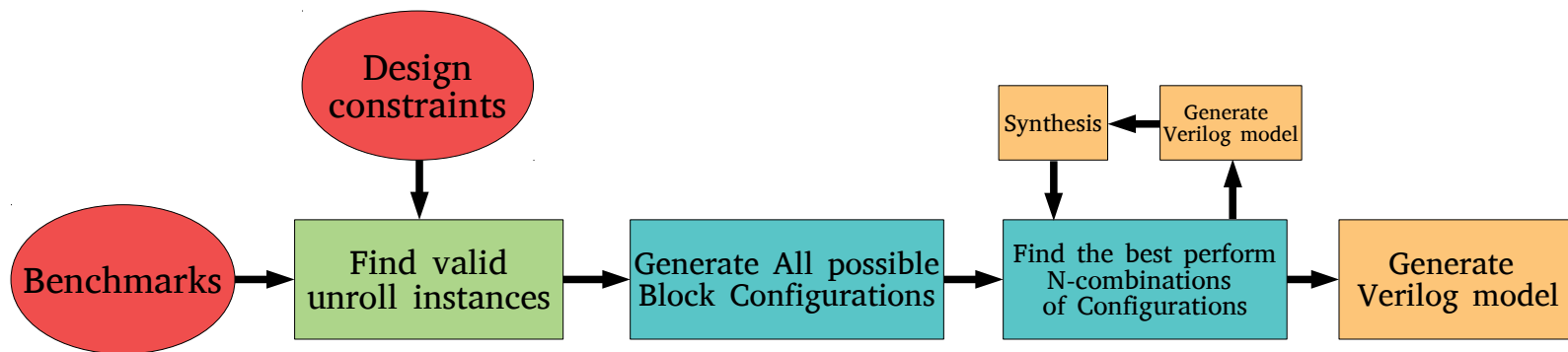
a) Heuristic



b) N-Config search



a) Heuristic



b) N-Config search

# Algorithm

```

for  $g_1 = 0 : C_1^{(1)} - C_1^{(1)min} - 1$ 
  for  $g_2 = 0 : C_2^{(1)} - C_2^{(1)min} - 1$ 
    for  $h_1 = 0 : R_1^{(1)} - R_1^{(1)min} - 1$ 
      for  $h_2 = 0 : R_2^{(1)} - R_2^{(1)min} - 1$ 
        for  $r_1 = 0 : R_1^{(1)} - R_1^{(1)min} - 1$ 
          for  $r_2 = 0 : R_2^{(1)} - R_2^{(1)min} - 1$ 
             $Q(g_1, g_2, h_1, h_2, r_1, r_2) = W(g_1, g_2, h_1, h_2, r_1, r_2)$ 

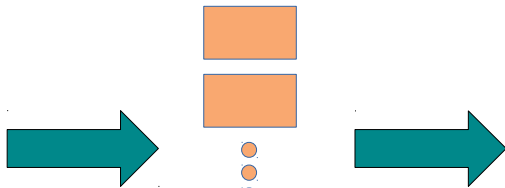
```

```

for  $h_1 = 0 : R_1^{(1)} - R_1^{(1)min} - 1$ 
  for  $h_2 = 0 : R_2^{(1)} - R_2^{(1)min} - 1$ 
    for  $g_1 = 0 : C_1^{(1)} - C_1^{(1)min} - 1$ 
      for  $g_2 = 0 : C_2^{(1)} - C_2^{(1)min} - 1$ 
        for  $r_1 = 0 : R_1^{(1)} - R_1^{(1)min} - 1$ 
          for  $r_2 = 0 : R_2^{(1)} - R_2^{(1)min} - 1$ 
             $Q(g_1, g_2, h_1, h_2, r_1, r_2) = W(g_1, g_2, h_1, h_2, r_1, r_2)$ 

```

## Unrollings



## Projections

$$\langle (U_{R-W}, W_{rate}, W_{stride}), U_{R-N}, U_E, U_B, U_G \rangle$$

$$\langle (U_{R-W}, W_{rate}, W_{stride}), U_{R-N}, U_E, U_B, U_G \rangle$$

⋮

$$\langle (U_{R-W}, W_{rate}, W_{stride}), U_{R-N}, U_E, U_B, U_G \rangle$$

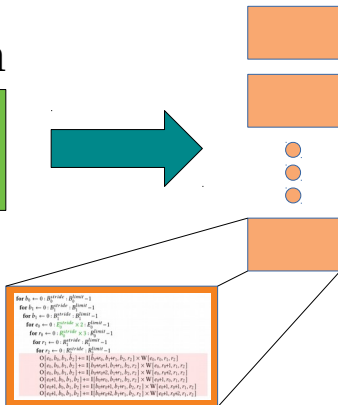
## Algorithm

```

for  $g_1 = 0 : G^{(0)}_1 : G^{(max)}_1 - 1$ 
  for  $g_2 = 0 : G^{(0)}_2 : G^{(max)}_2 - 1$ 
    for  $h_1 = 0 : H^{(0)}_1 : H^{(max)}_1 - 1$ 
      for  $h_2 = 0 : H^{(0)}_2 : H^{(max)}_2 - 1$ 
        for  $r_1 = 0 : R^{(0)}_1 : R^{(max)}_1 - 1$ 
          for  $r_2 = 0 : R^{(0)}_2 : R^{(max)}_2 - 1$ 
             $Q(g_1, g_2, h_1, h_2, r_1, r_2) = \text{sum}$ 
               $(W(g_1, g_2, h_1, h_2, r_1, r_2) \times W(g_1, g_2, h_1, h_2, r_1, r_2))$ 

```

## Unrollings



```

for  $h_1 = 0 : H^{(0)}_1 : H^{(max)}_1 - 1$ 
  for  $h_2 = 0 : H^{(0)}_2 : H^{(max)}_2 - 1$ 
    for  $r_1 = 0 : R^{(0)}_1 : R^{(max)}_1 - 1$ 
      for  $r_2 = 0 : R^{(0)}_2 : R^{(max)}_2 - 1$ 
        for  $g_1 = 0 : G^{(0)}_1 : G^{(max)}_1 - 1$ 
          for  $g_2 = 0 : G^{(0)}_2 : G^{(max)}_2 - 1$ 
             $Q(g_1, g_2, h_1, h_2, r_1, r_2) = \text{sum}$ 
               $(W(g_1, g_2, h_1, h_2, r_1, r_2) \times W(g_1, g_2, h_1, h_2, r_1, r_2))$ 

```

## Projections

$$P(0): \langle (U_{R-W}^0, W_{rate}^0, W_{stride}^0), U_{R-N}^0, U_E^0, U_B^0, U_G^0 \rangle$$

$$P(1): \langle (U_{R-W}^1, W_{rate}^1, W_{stride}^1), U_{R-N}^1, U_E^1, U_B^1, U_G^1 \rangle$$

⋮

$$P(N): \langle (U_{R-W}^N, W_{rate}^N, W_{stride}^N), U_{R-N}^N, U_E^N, U_B^N, U_G^N \rangle$$





