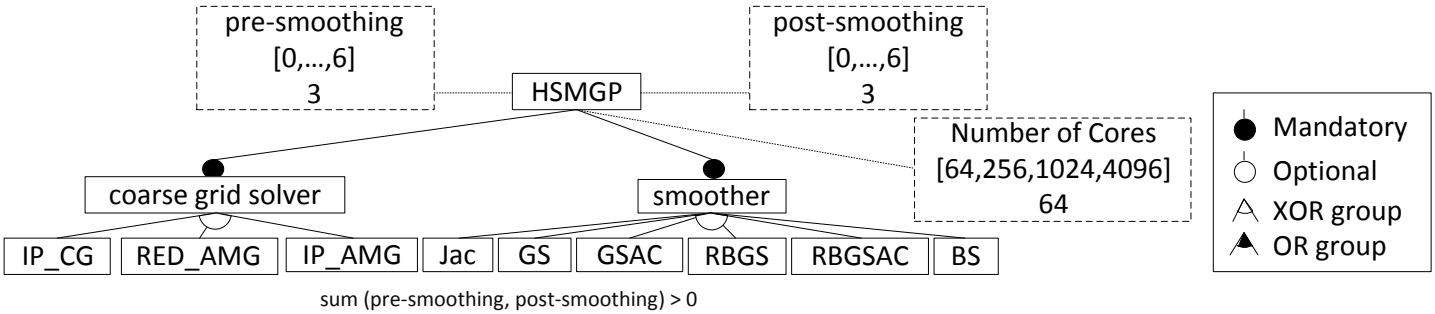
Interview I (HSMGP)



(round 9, error 18.27)

$$
\begin{aligned}
&+ 310.0 \cdot root && + 200.0 \cdot Smoother\_GSACBE \\
&- 120.0 \cdot Smoother\_GS && - 120.0 \cdot Smoother\_JAC \\
&- 160.0 \cdot Smoother\_GSAC && - 13.0 \cdot CGS\_IP\_AMG \\
&+ 4.2 \cdot pre \cdot pre && + 310.0 \cdot Smoother\_GSACBE \cdot post \\
&+ 45.0 \cdot Smoother\_GSACBE \cdot pre \cdot pre && + 3.6 \cdot Smoother\_GSAC \cdot post \cdot post
\end{aligned}
$$

(round 13, error 7.17)

$$
\begin{aligned}
&+ 150.0 \cdot root && - 30.0 \cdot Smoother\_GSACBE \\
&- 120.0 \cdot Smoother\_GS && - 120.0 \cdot Smoother\_JAC \\
&- 85.0 \cdot Smoother\_GSAC && - 13.0 \cdot CGS\_IP\_AMG \\
&+ 28.0 \cdot post && + 27.0 \cdot pre \\
&+ 1.4 \cdot pre \cdot pre && + 300.0 \cdot Smoother\_GSACBE \cdot post \\
&+ 310.0 \cdot Smoother\_GSACBE \cdot pre && + 0.0027 \cdot post \cdot numCore \\
&- 1.8 \cdot Smoother\_GSACBE \cdot pre \cdot pre && - 0.90 \cdot Smoother\_GSAC \cdot post \cdot post
\end{aligned}
$$

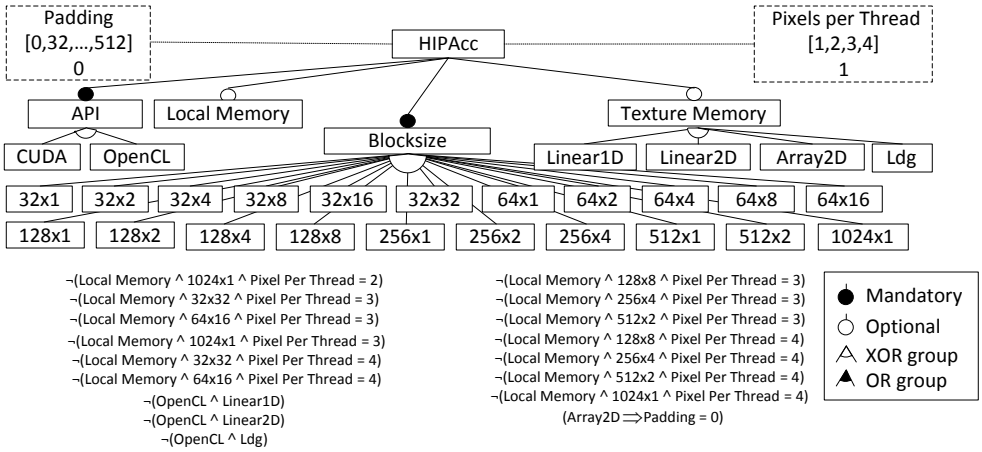
(round 19, error 2.83)

$$
\begin{aligned}
&+ 120.0 \cdot root && + 13.0 \cdot Smoother\_GSACBE \\
&- 31.0 \cdot Smoother\_GS && - 26.0 \cdot Smoother\_JAC \\
&- 11.0 \cdot Smoother\_GSAC && - 17.0 \cdot CGS\_IP\_AMG \\
&+ 21.0 \cdot post && + 18.0 \cdot pre \\
&+ 1.8 \cdot pre \cdot pre && + 290.0 \cdot Smoother\_GSACBE \cdot post \\
&+ 320.0 \cdot Smoother\_GSACBE \cdot pre && + 0.0027 \cdot post \cdot numCore \\
&+ 19.0 \cdot pre \cdot Smoother\_GSRBAC && + 12.0 \cdot pre \cdot Smoother\_GSRB \\
&+ 2.0 \cdot post \cdot post && - 1.6 \cdot Smoother\_GSACBE \cdot pre \cdot pre \\
&- 2.1 \cdot Smoother\_GSAC \cdot post \cdot post && - 0.41 \cdot CGS\_IP\_AMG \cdot pre \cdot pre \\
&- 2.5 \cdot Smoother\_GS \cdot post \cdot post && - 2.4 \cdot Smoother\_JAC \cdot post \cdot post
\end{aligned}
$$

Complexity

$$
\begin{aligned}
&2.0 \cdot Smoother\_JAC \\
&2.0 \cdot pre \cdot post \\
&2.0 \cdot Smoother\_JAC \cdot pre \cdot post \\
&2.0 \cdot Smoother\_JAC \cdot pre \cdot post \cdot numCores
\end{aligned}
$$

Interview II (HIPACC)



(round 2, error 14.67)

$$\begin{aligned} &+ 26.0 \cdot root && + 15.0 \cdot bs\_1024x1 \\ &+ 13.0 \cdot LocalMemory \end{aligned}$$

(round 9, error 6.93)

$$\begin{aligned} &+ 27.0 \cdot root && + 18.0 \cdot bs\_1024x1 \\ &+ 15.0 \cdot LocalMemory && + 11.0 \cdot bs\_512x2 \\ &+ 19.0 \cdot bs\_32x1 && + 8.4 \cdot bs\_256x4 \\ &+ 7.4 \cdot bs\_32x32 && + 7.1 \cdot bs\_128x8 \\ &+ 7.0 \cdot bs\_64x16 && - 1.1 \cdot pixelPerThread; \end{aligned}$$

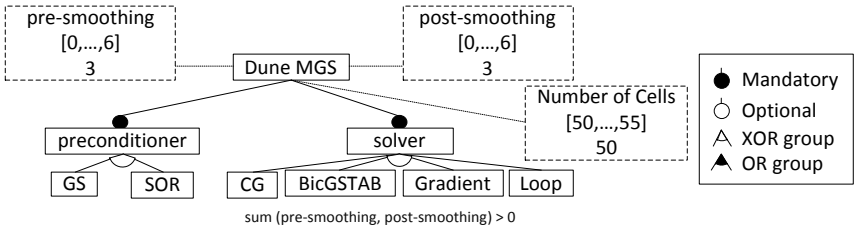
(round 27, error 3.11)

$$\begin{aligned} &+ 27.0 \cdot root && - 2.3 \cdot bs\_1024x1 \\ &+ 30.0 \cdot LocalMemory && - 3.9 \cdot bs\_512x2 \\ &+ 60.0 \cdot bs\_32x1 && + 8.0 \cdot bs\_256x4 \\ &+ 7.0 \cdot bs\_32x32 && + 6.8 \cdot bs\_128x8 \\ &+ 6.7 \cdot bs\_64x16 && - 1.7 \cdot pixelPerThread \\ &+ 2.7 \cdot bs\_512x1 && + 0.29 \cdot Array2D \\ &- 1.7 \cdot bs\_64x2 && + 0.55 \cdot bs\_256x2 \\ &- 2.1 \cdot bs\_32x4 && - 1.5 \cdot bs\_128x2 \\ &- 1.6 \cdot bs\_64x4 && - 28.0 \cdot pixelPerThread \cdot bs\_32x1 \\ &+ 16.0 \cdot pixelPerThread \cdot bs\_1024x1 && + 12.0 \cdot pixelPerThread \cdot bs\_512x2 \\ &- 0.56 \cdot pixelPerThread \cdot bs\_128x1 && - 13.0 \cdot pixelPerThread \cdot LocalMemory \\ &+ 1.0 \cdot pixelPerThread \cdot Array2D; && + 3.9 \cdot bs\_32x1 \cdot pixelPerThread \cdot pixelPerThread \\ &+ 0.036 \cdot pixelPerThread \cdot pixelPerThread \cdot pixelPerThread && - 2.6 \cdot bs\_1024x1 \cdot pixelPerThread \cdot pixelPerThread \\ &- 2.1 \cdot bs\_512x2 \cdot pixelPerThread \cdot pixelPerThread && + 2.3 \cdot pixelPerThread \cdot LocalMemory \cdot pixelPerThread \end{aligned}$$

Complexity

$$\begin{aligned} &2.0 \cdot Smoother\_JAC \\ &2.0 \cdot pre \cdot post \\ &2.0 \cdot Smoother\_JAC \cdot pre \cdot post \\ &2.0 \cdot Smoother\_JAC \cdot pre \cdot post \cdot numCores \end{aligned}$$

Interview III (DUNE)



(round 1, error 13.74)

$$-\ 23000.0 \cdot root \quad +\ 640.0 \cdot cells$$

(round 13, error 7.26)

$$\begin{aligned}
+\ 180000.0 \cdot root &\quad -\ 5300.0 \cdot cells \\
-\ 1000.0 \cdot post &\quad +\ 6800.0 \cdot GradientSolver \\
+\ 600.0 \cdot BiCGSTABSolver &\quad -\ 110.0 \cdot cells \cdot GradientSolver \\
+\ 2.6 \cdot cells \cdot pre &\quad +\ 1.9 \cdot cells \cdot post \cdot post \\
+\ 530.0 \cdot GradientSolver \cdot pre \cdot pre &\quad +\ 0.70 \cdot cells \cdot cells \cdot cells \\
+\ 380.0 \cdot GradientSolver \cdot post \cdot post &\quad -\ 38.0 \cdot BiCGSTABSolver \cdot pre \cdot pre \\
-\ 11.0 \cdot cells \cdot GradientSolver \cdot pre \cdot pre &\quad -\ 8.3 \cdot cells \cdot GradientSolver \cdot post \cdot post
\end{aligned}$$

(round 25, error 3.54)

$$\begin{aligned}
+\ 670000.0 \cdot root &\quad -\ 19000.0 \cdot cells \\
-\ 2800.0 \cdot post &\quad -\ 5000.0 \cdot GradientSolver \\
+\ 1200.0 \cdot BiCGSTABSolver &\quad +\ 11000.0 \cdot pre \\
+\ 130.0 \cdot cells \cdot GradientSolver &\quad -\ 200.0 \cdot cells \cdot pre \\
+\ 1700.0 \cdot post \cdot SeqSOR &\quad -\ 350.0 \cdot post \cdot GradientSolver \\
+\ 220.0 \cdot post \cdot BiCGSTABSolver &\quad +\ 8.3 \cdot cells \cdot post \cdot post \\
+\ 12000.0 \cdot GradientSolver \cdot pre \cdot pre &\quad +\ 2.4 \cdot cells \cdot cells \cdot cells \\
-\ 130.0 \cdot GradientSolver \cdot post \cdot post &\quad -\ 16.0 \cdot BiCGSTABSolver \cdot pre \cdot pre \\
-\ 0.098 \cdot cells \cdot pre \cdot SeqGS &\quad -\ 4.6 \cdot cells \cdot pre \cdot post \\
-\ 270.0 \cdot post \cdot SeqSOR \cdot post &\quad -\ 440.0 \cdot cells \cdot GradientSolver \cdot pre \cdot pre \\
+\ 2.7 \cdot cells \cdot GradientSolver \cdot post \cdot post &\quad +\ 2.2 \cdot cells \cdot pre \cdot post \cdot LoopSolver \\
+\ 0.015 \cdot cells \cdot cells \cdot cells \cdot CGSolver &\quad +\ 9.7 \cdot cells \cdot pre \cdot post \cdot SeqGS \\
-\ 1.6 \cdot cells \cdot pre \cdot SeqGS \cdot post \cdot post &\quad +\ 3.8 \cdot GradientSolver \cdot pre \cdot pre \cdot cells \cdot cells
\end{aligned}$$

Complexity

$$\begin{aligned}
2.0 \cdot Smoother_JAC \\
2.0 \cdot pre \cdot post \\
2.0 \cdot Smoother_JAC \cdot pre \cdot post \\
2.0 \cdot Smoother_JAC \cdot pre \cdot post \cdot numCores
\end{aligned}$$