Recap: SIMD Vectorization

- Midgard GPUs use SIMD vectorization
 - One thread at a time executes in each pipeline stage
 - Each thread must fill the width of the hardware

- Sensitive to shader code
 - Code always evolving
 - Compiler vectorization is not perfect
 - Have to detect combinations of operations which can be merged to fill idle lanes
 - Scalar operations can not always be merged into vectors

