



Optimizations for Printing

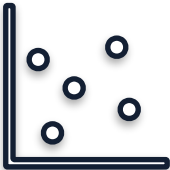


- During conversion:
  - Dead code elimination
  - Constant folding
  - Constant propagation



# Locus program

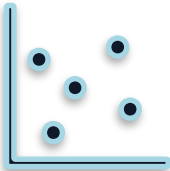




Locus's  
space







Search Module's  
opt space

Return a  
metric



Select a point  
and converts



Code  
Generator



Evaluate a  
variant

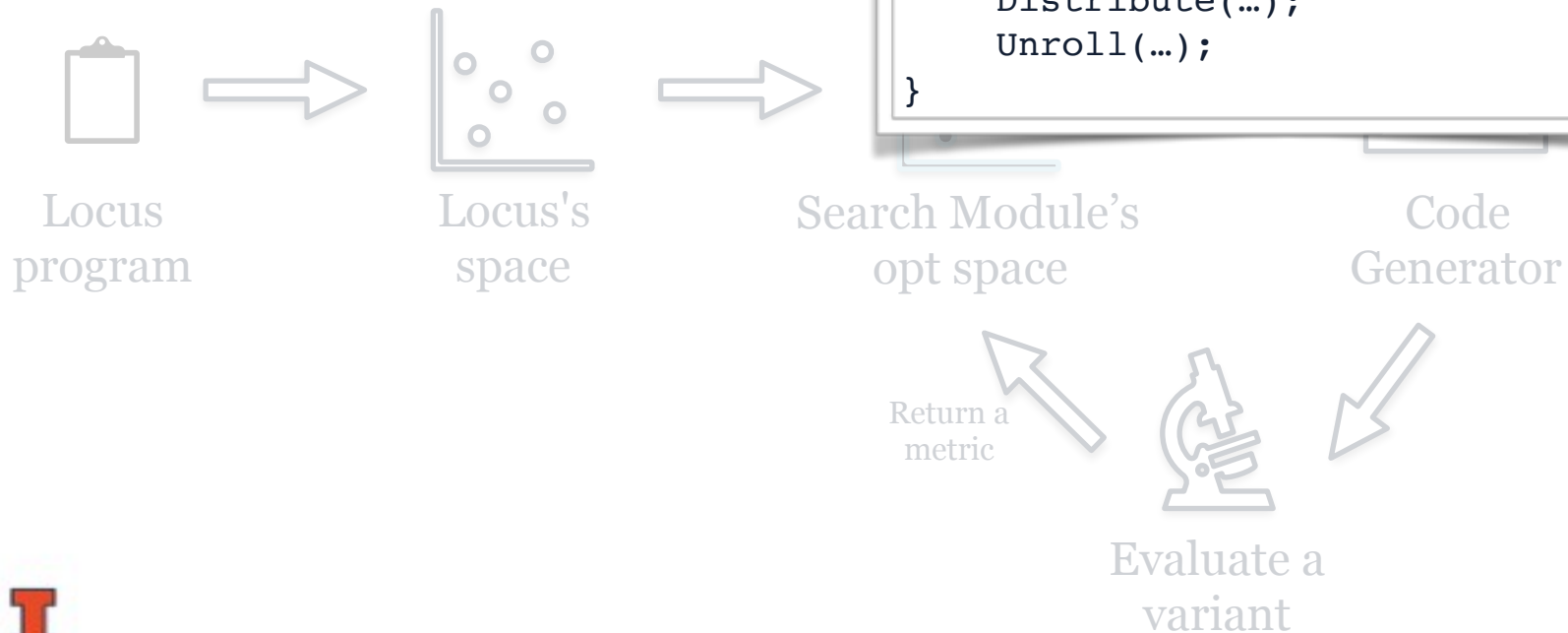
```
CodeReg test {  
    perfect = IsPerfectLoopNest();  
    if (perfect)  
    {  
        Interchange(...);  
    }  
    Tiling(...);  
    Distribute(...);  
    Unroll(...);  
}
```

False



# Optimizations for Pruning

- During conversion:
  - Dead code elimination
  - Constant folding
  - Constant propagation





# Experimental Results

- Intel Xeon E5-2660 10-Core 2.60 GHz
- Compared to Pluto and Intel MKL
  - Default values for parameters, no search
- Examples:
  - Matrix-Matrix Multiplication
  - Stencil Kernels
  - Kripke
  - Arbitrary Loop Nests
- Generic enough to be applied on known and unknown code applications

