Dynamo: A Runtime Codesign Environment

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On this Environment:

Which implementations to use?

How to minimize overall latency?

When to use FPGA?

How to change the pipeline or interfaces dynamically?

Run this pipeline:

Median Filter & Edge Detection
Goals

Predict pipeline latency accurately:
Model includes all overhead costs of using the FPGA

Implement low latency solutions:
Problem space quickly searched

Build and execute pipelines at runtime:
User is not impacted
**Dynamo System Overview**

**Input:** The pipeline specification, an image, and a device name

**Output:** Results from executing pipeline on the image

**Libraries:** ipBLOC

**Model:** Pipeline Assignment