Gedae: Auto Coding to a Virtual Machine

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What is Gedae?

Gedae is a block diagram language ...

Express signal and data processing algorithms, parallelism, load balancing, fault tolerance and mode control.

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..that Gedae transforms under user control...

User can set optimization parameters that are independent of the graph to guide transformation

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...to operate efficiently on a virtual machine.

Complete systems can be developed independent of the target system without losing runtime efficiency.
Gedae’s Structure

- The block diagram is transformed using over 100 algorithms.
- The transformations establish the:
  - Order of execution
  - Queue sizes
  - Granularities
  - Memory layout
  - Dynamic schedule parameters
  - Data transfer types and parameters
  - Mode control

The Gedae transformations build a detailed model of the deployed application. Gedae uses that information to provide visibility.

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