

contributions

- Defined Locus language:
 - describe *concisely* complex space of optimizations
 - *agnostic* of any specific traversal method
 - *decouple* performance expert role from application expert role

- Implemented a system with flexible API for plugging in:
 - *different* variant selection techniques (optimization space traversal)
 - *collection* of transformations developed internally and externally

- Optimizer and interpreter for the Locus programs:
 - *prune* the space automatically
 - speeds-up the empirical search

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Locus Approach

- Baseline code: defined by the developer, no platform- or compiler-specific optimizations
- Annotated regions of interest (i.e., code regions)
- Program the application of the optimizations for each code region