Optimizations for Dynamic Languages (e.g., JavaScript)


Dynamic and Profile-Based Code Optimization


Machine Learning and Optimizations


Information Flow and Security


Pointer Analysis


Cache Optimizations


Md Kamruzzaman, Steven Swanson, and Dean M. Tullsen. “Inter-core prefetching for multicore processors using migrating helper threads,” in Proceedings of the sixteenth international conference on Architectural support for programming languages and operating systems (ASPLOS), 2011.


Instruction Scheduling


Compiler Support for Approximate Computing


Compiling for GPUs


Exploiting Data Parallelism


Automatically Creating Parallel Threads


Creating Parallel Threads Speculatively
