

Correlation Between State and Control Signals in Out-of-order Issue Logic

Checkpoint 2: 11/21/00

Kenneth Barr

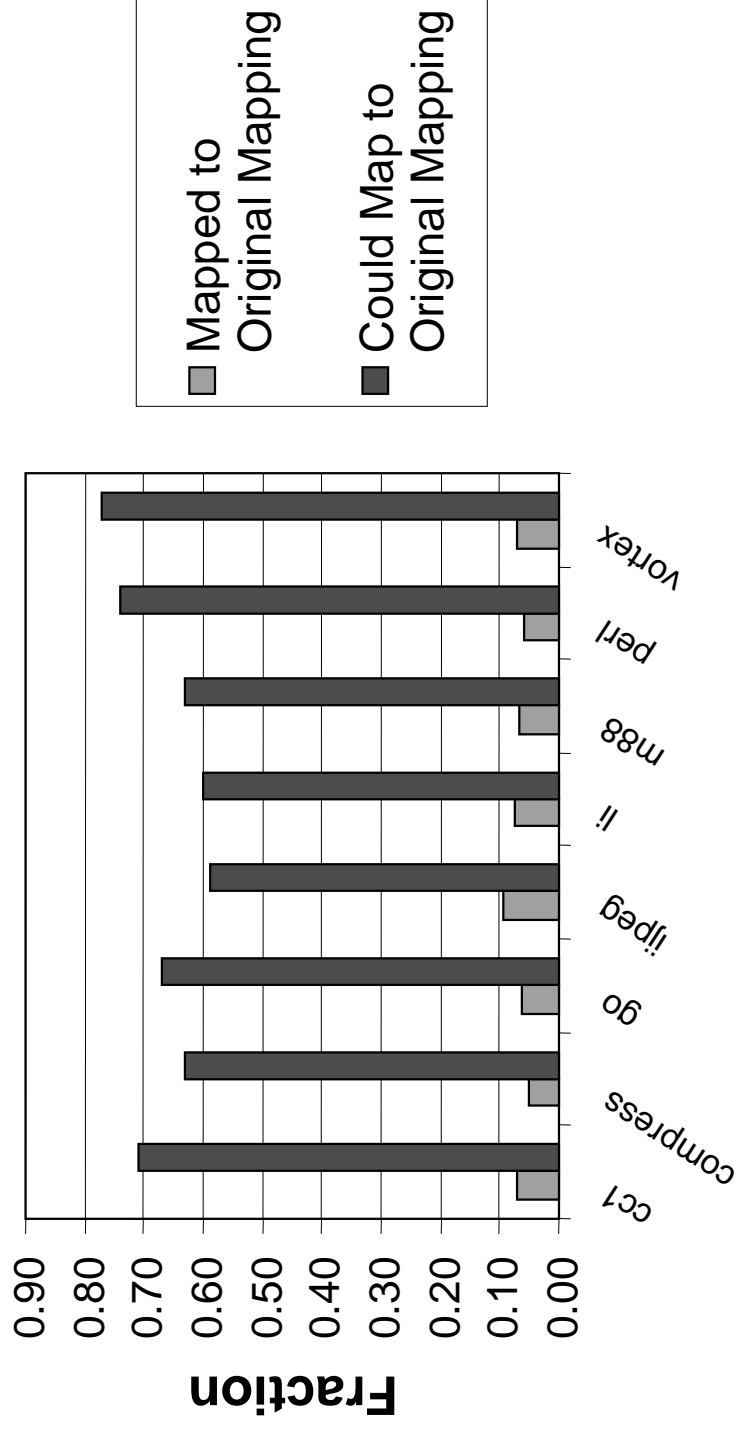
Kenneth Conley

Serhii Zhak

Status Update

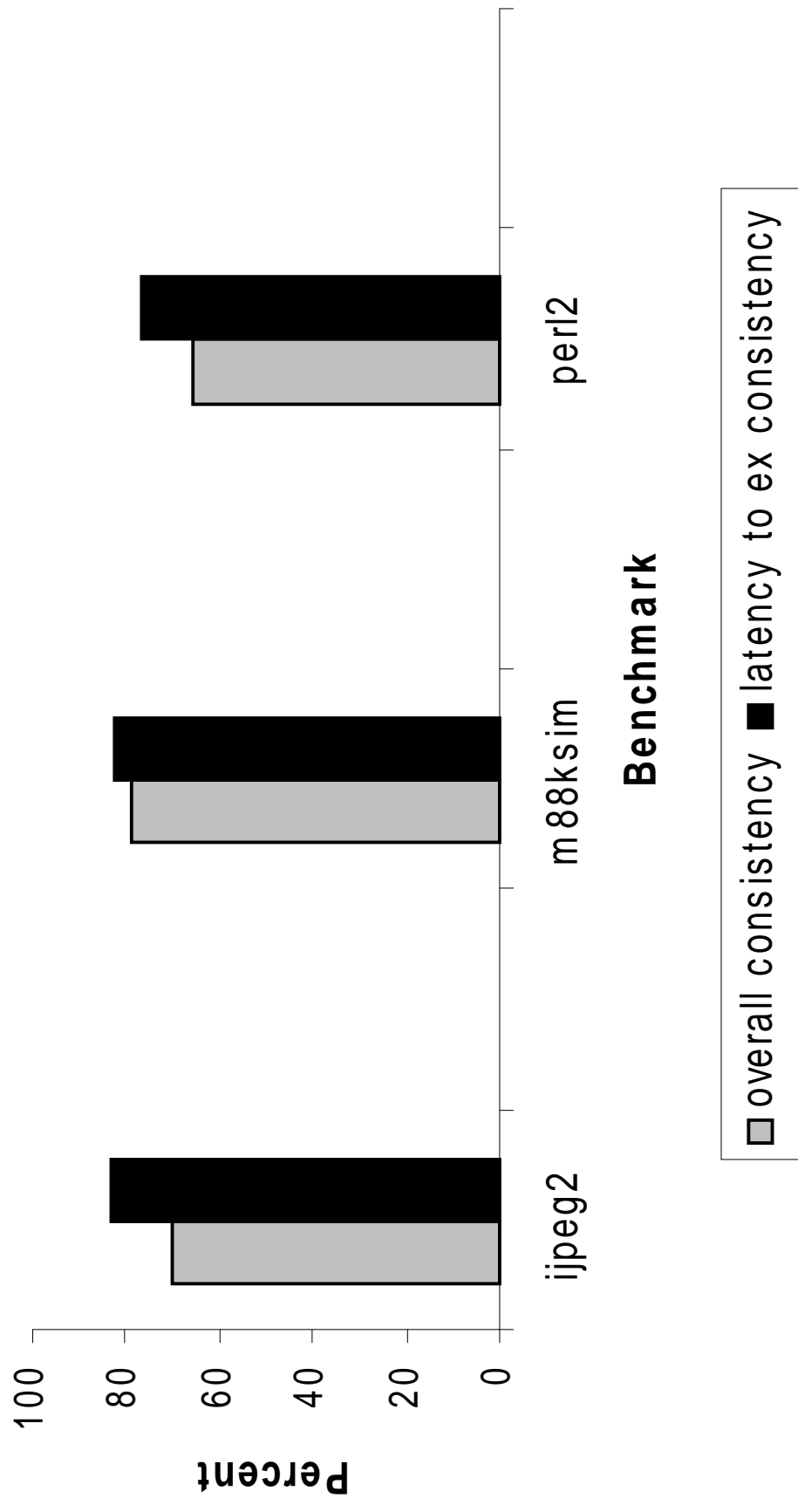
- Highlights
 - Data for individual instruction consistency
 - Data for PC_Fetch vs. Issue Window consistency
 - Data for register renaming
 - Data for instruction repetition
- Lowlights
 - Hard to collect large pipetraces
 - Spent a lot of time rewriting tools to support larger pipetraces
 - Repetition of research

Renaming Results

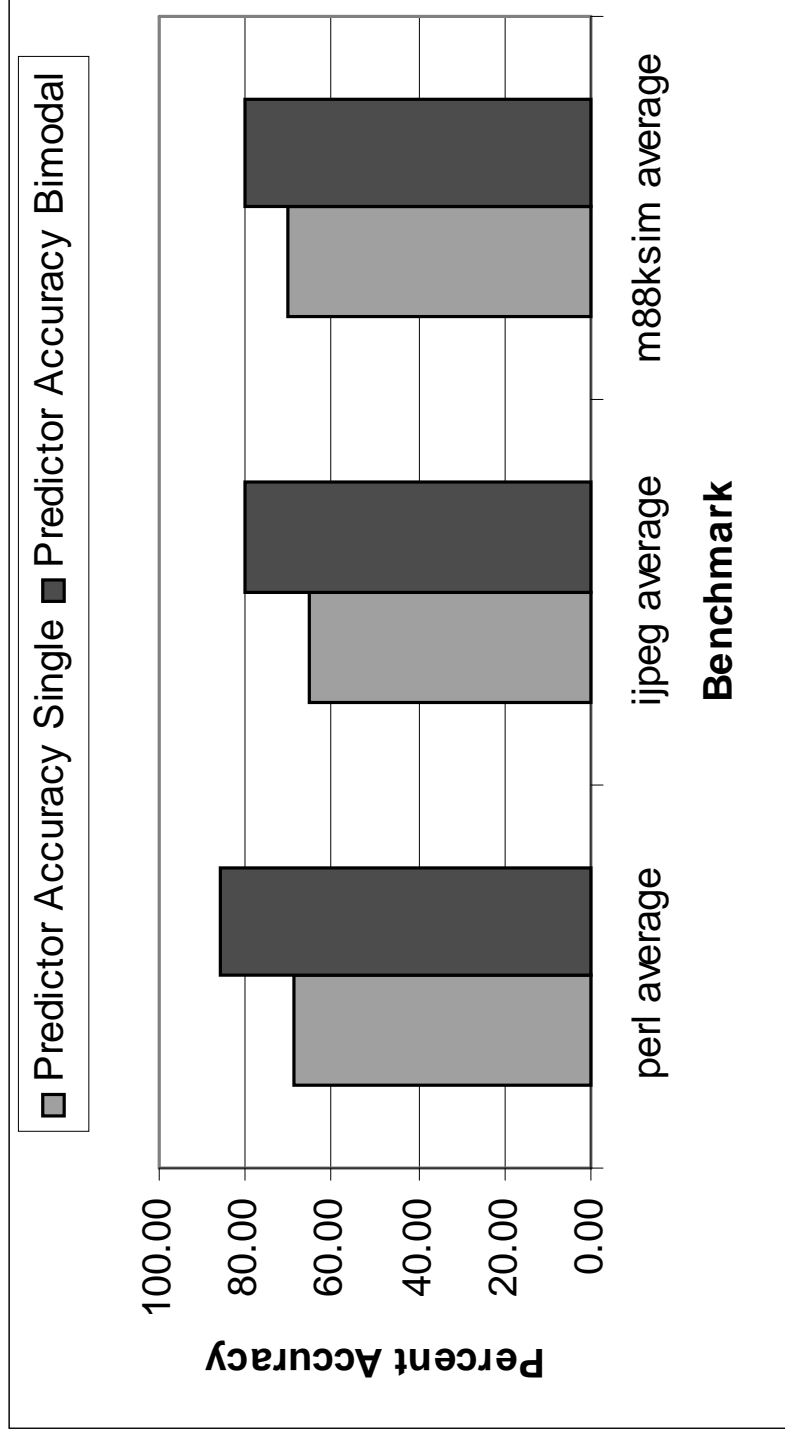


Benchmark

Individual Instruction Consistency



Fetch_PC vs. Issue Window Consistency



The Road to the Finish Line

- Issue Oracle
 - Verify functionality
 - Collect data
 - Compare results against expected results (consistency data)
 - Test different oracle prediction rules
- Renaming
 - Collect data for forced renaming
- Consistency Data
 - Greater variety of traces