Sequential Code

Points-to Profiler | Edge Profiler | Memory Profiler

Static Analysis | Separation Spec | Control Spec | Memory Spec

Annotated PDG

pathcost

OVERWRITE (e1)

UO={6} (v1)

29

OVERWRITE (e2)

(e3) (e4) (e5)

UO={6} (v2)

40

(e7)

UO={6} (v3)

43

(e6) (e8)

| RAW |
| WAR |
| WAW |

dist

OVERWRITE (e9)

UO={3} (v4)

not live out (v4')

13

(e10) (e11)

37

UO={3} (v5)

not live out (v5')

REMOVABLE:
| Static Analysis | (e3) (e4) (e5) (e6) (e7) (e8) |
| Memory Speculation | (e5) (e8) |

REMOVABLE:
| Static Analysis + Control Speculation | (e10) (e11) |
| Memory Speculation | (e11) |

OVERWRITE:
| Static Analysis | (e1) (e2) |

OVERWRITE:
| Static Analysis + Control Speculation | (e9) |

UO:
| Separation Speculation | (v1) (v2) (v3) |

UO:
| Static Analysis | (v4) (v4') (v5) (v5') |
| Separation Speculation | (v4) (v5) |

Classifier

Properties & Runtime Overheads

pathcost

UO: {6}

Properties
i) is privatizable due to
   UO annotation of (v1), (v2), (v3) and
   REMOVABLE annotation of (e5), (e8)
ii) has known last update iteration due to
   OVERWRITE annotation of (e1), (e2)

Rumtime Overheads
- Head check for UO

dist

UO: {3}

i) is privatizable due to
   UO annotation of (v4), (v5) and
   REMOVABLE annotation of (e11)
ii) is not live-out due to
   UO annotation of (v4') (v5')

- Misspec check for control speculation