

# Precise Memory Leak Detection for Java Software Using Container Profiling

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*We'll classify related work by:*

- *Approach:* Static vs. Dynamic
- *Target:* Containers vs. Arbitrary objects
- *Metric:* Staleness vs. Growth

# Dynamic Approaches

## Container Based

## Arbitrary Objects

Staleness

Bond et al. 2006

*Bit-encoding online memory leak detection*

**Visualization only:**

DePauw et al. 2000, 1998.

*JProbe*

*JProfiler*

THIS PAPER

*LeakHunter*

Jump et al. 2007

*Cork*

Growth

Mitchel et al. 2003

*Leakbot*

# Static Approaches

- D. L. Heine and M. S. Lam. Static detection of leaks in polymorphic containers. 2006.
  - Only *container-based* static technique
- M. Orlovich and R. Rugina. Memory leak analysis by contradiction. 2006.
- N. Dor et al. Checking cleanness in linked lists. 2000.