

Verifying a Binary Search Tree with Fine-Grained Locking

William Mansky

1 Introduction

2 Background

2.1 VST and Iris

2.2 Atomic Specifications

3 Safety Proofs

3.1 Lock invariants for hand-over-hand locking

4 Correctness Proofs

4.1 Locking and atomicity

4.2 Insert and Lookup

4.3 Delete

5 Related Work

6 Conclusion