**General Exam Reading List**

1. (Foundational, Textbook) [Software Foundations, vol. 1 & 2](#), Pierce et al.
2. (Foundational, Textbook) Logic in Computer Science, Huth and Ryan
3. (Foundational SMT) [Handbook of Model Checking](#), chapter on Satisfiability Modulo Theories, Barrett and Tinelli
4. (Foundational MC) Handbook of Model Checking, chapter on Interpolation and Model Checking, McMillan
5. (Foundational HW) [Automatic verification of pipelined microprocessor control](#), Burch & Dill CAV'94
6. (Foundational, MCM) [A Primer on Memory Consistency and Cache Coherence](#), chapters 3, 5, 11
7. (Closely Related, ILA) [Instruction-Level Abstraction (ILA): A Uniform Specification for System-on-Chip (SoC) Verification](#), Huang et al. TODAES'18
8. (Closely Related, 3LA) [Relay: A New IR for Machine Learning Frameworks](#), Roesch et al. MAPL'18
9. (Related, Loop optimization) [Halide: A Language and Compiler for Optimizing Parallelism, Locality, and Recomputation in Image Processing Pipelines](#), Ragan-Kelley et al. PLDI'13
10. (Related Prior Art) Adam Betts, Nathan Chong, Alastair F. Donaldson, Jeroen Ketema, Shaz Qadeer, Paul Thomson, John Wickerson: [The Design and Implementation of a Verification Technique for GPU Kernels](#). ACM Trans. Program. Lang. Syst. 37(3): 10:1-10:49 (2015)