

Reading List

Computing Systems Concentration

(CSys)

Students taking the breadth comprehensive exam in CSys concentration should be familiar with the following:

1. Amadot T., F. Wilson, T. Rogers, [General Purpose GPU Architectures](#), Synthesis Lectures in Computer Architecture, Morgan & Claypool, 2018.
2. Garg S., C. Gentry, S. Halevi, M. Raykova, A. Shai, B. Waters, [Candidate indistinguishability obfuscation and functional encryption for all circuits.](#), *IEEE Annual Symposium on Foundations of Computer Science*, pp. 40-49, 2013.
3. Dean J., S. Ghemawat, [MapReduce: Simplified data processing on large clusters](#), Symposium on Operating Systems Design and Implementation, Vol. 6, 2008.
4. Goel P., B.C. Rosales, [PODEM-X: An automatic test generation system for VLSI logic structures](#), *Proceedings of the 18th conference on Design automation*, pp. 260-268, 1981.
5. Lee E.A., [Cyber physical systems: Design challenges](#), *IEEE Symposium on Object Oriented Real-Time Distributed Computing (ISORC)*, pp. 363-369, 2008.
6. Rieffel E., W. Polak, [An introduction to quantum computing for non-physicists](#), *ACM Computing Surveys*, 32(3), pp. 300-335, 2000.
7. Shi W., J. Cao, Q. Zhang, Y. Li, L. Xu, [Edge computing: Vision and challenges](#), *IEEE Internet of Things Journal*, 3(5), pp. 637-646, 2016.
8. Torres-Pomales W., [Software fault tolerance: A tutorial](#), *NASA Langley Technical Report Server*, 2000.
9. Xiao Y., G. Shi, Y. Li, W. Saad, H. Vincen Poor, [Toward self-learning edge intelligence in 6G](#), *IEEE Communications Magazine*, 58(12), pp. 34-40, 2020.