**C. M. Krishna**
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**Areas of Specialization:**

Real-Time Computing, Power- and Thermal-aware Computing, Sensor Networks, Computer Networks, Computer System Modeling & Analysis, Fault-Tolerant Computing.

**Education:**

Indian Institute of Technology, Delhi, India, Electrical Engineering: B.Tech., 1979.
Rennselaer Polytechnic Institute, Troy, NY, Electrical Engineering: M.S., 1980.
University of Michigan, Ann Arbor, MI, Electrical Engineering: Ph.D., 1984.

Thesis Title: "On The Design and Analysis of Real–Time Computers"

**Employment:**

• Professor of Electrical and Computer Engineering, University of Massachusetts, September 1997 – present.
• Associate Professor of Electrical and Computer Engineering, University of Massachusetts, September 1990 – August 1997.
• Assistant Professor of Electrical and Computer Engineering, University of Massachusetts, September 1984 – August 1990.
• Visiting Scientist, IBM Thomas J. Watson Research Center, Summer 1986.

**Selected Recent Publications**

1. Y. Xu, I. Koren and C.M. Krishna, "AdaFT: A Framework for Adaptive Fault-Tolerance for Cyber-Physical Systems," *ACM Transactions on Embedded Computing Systems*, Vol. 16, No. 3, 2017.

2. M. Chhablani, I. Koren and C.M. Krishna, "Online Intertia-Based Temperature Estimation for Reliability Enhancement," *Journal of Low Power Electronics*, Vol. 12, No. 3, 2016.

3. C.M. Krishna, "Ameliorating Thermally Accelerated Aging with State-based Application of Fault-Tolerance," *IEEE Transactions On Reliability*, Vol. 64, No. 1, 2015, pp. 4–14.

4. R.C. Ravindran, C.M. Krishna, I. Koren and Z. Koren, "Scheduling Imprecise Task Graphs for Real-Time Applications," *International Journal of Embedded Systems*, Vol. 6, No. 1, 2014.

5. C.M. Krishna, "Fault-Tolerant Scheduling in Homogeneous Real-Time Systems," *ACM Computing Surveys*, Vol. 46, No. 4, 2013.

6. N. Prakash, I. Koren and C.M. Krishna, "Low Cost Dynamic Architecture Adaptation Schemes for Drowsy Cache Management," *Journal of Low Power Electronics*, Vol. 9, No. 4, 2013.

7. H. Wang, I. Koren and C.M. Krishna, "Runtime Architecture Adaptation for Energy Management in Embedded Real-Time Systems," *International Green Computing Conference*, 2012, pp. 1–9.

8. H. Wang, I. Koren and C.M. Krishna, "Utilization-Based Resource Partitioning for Power-Performance Efficiency in SMT-based Processors," *IEEE Transactions on Parallel and Distributed Systems*, Vol. 22, No. 7, 2011, pp. 1150–1163.

9. C. M. Krishna, "Managing Battery and Supercapacitor Resources for Real-Time Sporadic Workloads," *IEEE Embedded Systems Letters*, Vol. 3, No. 1, 2011, pp. 32–36.

10. K. Hadi and C.M. Krishna, "Management of Target-Tracking Sensor Networks," *International Journal of Sensor Networks*, Vol. 8, No. 2, 2010, pp. 109–121.