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kernels from an fdm code with ppOpen-AT. In *Embedded Multicore/Manycore SoCs (MCSoc), 2014 IEEE 8th International Symposium on*, pages 91–98. IEEE.

Lophaven, S. N., Nielsen, H. B., and Sondergaard, J. (2002). Aspects of the Matlab toolbox DACE. Technical Report IMM-REP-2002-13, Technical University of Denmark.

Mariani, G., Palermo, G., Zaccaria, V., and Silvano, C. (2012). Oscar: An optimization methodology exploiting spatial correlation in multicore design spaces. *IEEE Trans. Comput.-Aided Des. Integr. Circuits*, 31(5):74

McKay, M. D., Beckman, R. J., and Conover, W. J. (1979). A comparison of three methods for selecting values of input variables in the analysis of output from a computer code. *Technometrics*, 21(2):239 – 245.

Monsifrot, A., Bodin, F., and Quiniou, R. (2002). A machine learning approach to automatic production of compiler heuristics. In *Artificial Intelligence: Methodology, Systems, and Applications*, pages 41–50. Springer.

Murata, R., Irie, J., Fujii, A., and Katagiri, T. (2015). Enhancement of incremental performance parameter estimation on ppOpen-AT. In *Embedded Multicore/Manycore SoCs on-Chip (MCSoc), 2015 IEEE 9th International Symposium on*, pages 203–210. IEEE.

Pellegrini, G., Gier, L., Jordan, H., and Moritsch, H. (2010). Automatic tuning of parameter settings by using machine learning. In *Proceedings of the 7th ACM International Conference on Computing Frontiers*, pages 115–116. ACM.

Qian, P. Z. G. (2012). Sliced latin hypercube designs. *Journal of the American Statistical Association*, 107(479):393–399.

Qian, P. Z. G., Wu, H., and Wu, C. F. J. (2008). Gaussian process models for computer experiments with qualitative and quantitative factors. *Technometrics*, 50(3):383–396.

