### A New Fast Multi-Context Method for Lossless Image Coding

Prof. Ryszard Stasiński,

Poznan University of Technology, Poland

Abstract:

A new efficient and fast context lossless image coding method is presented in the paper, named Multi-ctx. High performance is obtained due to the fact that predictors are chosen from a very large database. On the other hand, simple rules determining contexts result in low computational complexity of the method. The technique can be easily adapted to specific class of applications, as the algorithm can be trained on a set of exemplary images. For the purpose of proving its potential it has been trained on a set of 45 images of various type, then its performance compared to that of some widely used fast techniques. Indeed, the new method appears to be the best, even better than CALIC approach.