

This work goals are SIMULA classes to model experts sessions so that each expert has his own start ideas the optimal system's parameters. All the experts are simulating the system (each expert with his own parameters), but during the simulation they are mutually exchanging information about behavior of theirs models and – in accordance with this information – they are learning, changing their own system parameters. The learning process is performed by means of genetic algorithms. The resulting optimizer is tested on concrete examples, both from the mathematical theory and real practice (e.g. optimizing of a given project). This work reassumes the dissertation of RNDR. Jiří Weinberger. CSc., who made similar type of optimizer in the 80es, when nothing concrete was known on genetic algorithms and so the experts learning scheme was modeled by techniques, which had great success in solution of real problems afterwards; but nowadays it is worth to replace them by genetic algorithms, or at least to compare both methods. Genetic algorithms are successfully used in systems optimization, where the model run is algorithmic-managed, but never in the way of directly changing the models during their running times. Parallel run of multiple simulating models on the computer equipped with only one processor requires special programming mean, which is just SIMULA (object, block and process oriented language).