

1990— 1997 : Reliability computation of communication networks

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1998 — 2000 : Optimization of communication networks by genetic algorithms

- Yu LI, Bouchebaba YOUCEF, *A new genetic algorithm for the optical communication spanning tree problem*, Springer LNCS 1829, pp. 162-173, Artificial Evolution 99, Dunkerque, France, November 1999.
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2007 — 2011 : Sum coloring problem resolution by heuristics

- Yu LI, Corinne LUCET, Aziz MOUKRIM, Kaoutar SGHIOUER, *Greedy algorithms for the sum coloring problem*. International Workshop : Logistic and Transport, 22-24 2009, Sousse, Tunisie.
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2008 — 2012 : NP problems

(1) Theory of NP-completeness

Seminars :

- August 2011, Wuhan, China : Interpretation of « décision problems » in theory of NP-completeness
- May 2012, Wuhan, China : Investigating Cook's theorem

- June 2012, Amiens, France : Interpretation of « decision problem »
– investigating Cook's theorem

(2) SAT problem resolution by heuristics

- Chu Min LI and Wanxia WEI and Yu LI, Exploiting historical relationships of clauses and variables in local search for satisfiability, Proceedings of SAT-2012, pp.479-480.
- Chu Min LI and Yu LI, Satisfying versus Falsifying in Local Search for Satisfiability, Proceedings of SAT-2012, pp. 477-478.