

Europass Curriculum Vitae



Personal information

Surname(s) / First name(s)

Nationality(-ies)

Date of birth

Istrate, Gabriel

Romanian

April 1, 1970

Education & Certification

Habilitation to direct Ph.D. theses
in Computer Science

Universitatea de Vest din Timișoara

O.M. 4881/18.08.2015

Ph.D. in Computer Science

University of Rochester, Rochester, NY

(Defense: May 28 1999)

Thesis Title: "Phase transitions in combinatorial optimization problems: towards rigorous results". Advisor: Mitsunori Ogihara

License in Mathematics

University of Bucharest, Bucharest, Romania

June 1994. (License is a 5 year program roughly equivalent in breadth to a U.S. M.Sc. It involves Comprehensive Examinations and a Thesis.)

Thesis Title: "Darboux-type properties in Real Analysis". Advisor: Solomon Marcus

Employment History

Researcher

eAustria Research Institute, Timișoara, Romania

March '07 – present

Member, Management Committee, COST action IC-0901 "Rich Model Toolkit: An Infrastructure for Reliable Computer Systems"

Associate Professor

Researcher (technical staff member)

Directors' Postdoctoral Fellow

Research Assistant

Selected Publications

Lead scientist for the e-Austria Research Institute, national research projects "GRAPH" ("Idei" program) and "NATCOMP" ("Parteneriate" program).

PI, Marie Curie International Reintegration Grant IRG-046573, "Phase transitions in Computational Complexity and Formal Verification: Towards Generic and Realistic Approaches".

Department of Computer Science, West University of Timișoara, Romania

April '13 – present

CCS-5 group "Basic and Applied Simulation Science", Los Alamos National Laboratory

September 2001 - February 2007

Center for Nonlinear Sciences and CCS-3 group, Los Alamos National Laboratory

Computer Science Department, University of Rochester

More complete publication list available at <http://www.ad-astra.ro/gistrate>

Gabriel Istrate, Madhav V. Marathe and S. S. Ravi. Adversarial scheduling in discrete models of social dynamics. *Mathematical Structures in Computer Science*, 22(5), pp. 788-815, 2012.

Cristopher Moore, Gabriel Istrate, Demetrios Demopoulos and Moshe Y. Vardi. A Continuous-Discontinuous Second-Order Transition in the Satisfiability of Random Horn-SAT Formulas. *Random Structures and Algorithms*, 31(2), pp. 173-185, 2007.

Christopher L. Barrett, Gabriel Istrate, V. S. Anil Kumar, Madhav V. Marathe, Shripad Thite and Sunil Thulasidasan. Strong Edge Coloring for Channel Assignment in Wireless Radio Networks. In *Proceedings of the Fourth IEEE International Conference on Pervasive Computing (PERCOMW' 06), Workshop on Foundations and Algorithms for Wireless Networking*, pp. 106-110. IEEE Computer Society Press, ISBN 0-7695-2520-2, 2006.

Selected awards and external recognition

Gabriel Istrate. The Phase Transition in Random Horn satisfiability and its algorithmic implications. *Random Structures and Algorithms*, vol. 20 no. 4, pp. 483-506, 2002.

Gabriel Istrate. Computational Complexity and Phase Transitions. In Proceedings of the 15th I. E. E. Conference on Computational Complexity. 2000.

For more comprehensive CV please see <http://gabrielistrate.weebly.com/about-me.html>

Member of the Editorial Board, *Computer Science Review*, Elsevier.

Program Committee Member, Machines Computation and Universality (MCU'13), Zurich, Switzerland.

Program Committee Member, International Colloquium on Automata, Languages and Programming (ICALP'02), Malaga, Spain.

Result included in D. Knuth, "The Art of Computer Programming", vol. 4, prefascicle 0B

editor (with A. Percus, and C. Moore) *Computational Complexity and Statistical Physics*, Oxford University Press, ISBN 0-19-517738-X, February 2006. Part of *The Santa Fe Institute Lecture Series on the Sciences of Complexity*.