Curriculum Vitae

Costas Voglis

Personal information

Date of birth:22 March, 1978Telephone-2: $+30\ 26510\ 63301$ Place of birth:IoanninaEmail:voglis@cs.uoi.grTelephone-1: $+30\ 6977053095$ Homepage:www.cs.uoi.gr/ \sim voglis

Marital status: Single Nationality: Greek

Current Status: PhD Candidate in Computer Science, University of Ioannina

EDUCATION

since 3/2002 Ph.D student in the Department of Computer Science, University of Ioannina,

Greece

Ph.D Dissertation: Continuous Local and Global Optimization with Applica-

tions

09/1999-09/2001 M.Sc in Computer Science, University of Ioannina

M.Sc Dissertation: Model Based Intrusion detection

08/1995-08/1999~B.Sc in Computer Science, University of Ioannina

B.Sc Dissertation: Intrusion Detection in TCP/IP Networks

GRANTS-FUNTS

1995 Scholarship from the Department of Computer Science, University of Ioannina

for the undergraduate programme.

1999–2001 Scholarship from the Department of Computer Science, University of Ioannina

for the graduate programme.

9/2004-8/2005 Scholarship supported by the European Union in the framework of the project

"Support of Computer Science Studies in the University of Ioannina" of the 3rd

Community Support Framework of the Hellenic Ministry of Education

Research Interests

• Development and implementation of Global and Local Optimization methods.

- Implementation of parallel algorithms (MPI, OpenMP)
- Simulation of classical systems with the Molecular Dynamics techniques
- Neural Networks for pattern recognition and function approximation.
- Optimization in Inverse Scattering problems.
- Graph Drawing.

RESEARCH ACTIVITIES

- Publications in International Scientific Journals and Conferences.
- Member of IPAN (Information Processing and Analysis Research Group) in the Dept. of Computer Science, University of Ioannina.

Publications

Journal Papers

- 1. C. Voglis and I.E. Lagaris, A Global Optimization Approach to Neural Network Training, Neural, Parallel & Scientific Computations 14:231–240, 2006.
- 2. M.G. Tsipouras, C. Voglis and D.I. Fotiadis, A Framework for Fuzzy Expert System Creation Deplication to Cardiovascular Diseases, *IEEE Transactions on Biomedical Engineering*, (54):2089–2105, 2007.
- 3. C.Papadopoulos and C. Voglis, Drawing Graphs using Modular Decomposition, *Journal of Graph Algorithms and Applications* 11(2): 481–511, 2007.
- 4. C. Voglis, I.E. Lagaris, M.L. Lekala, G.J. Rampho and S.A. Sofianos, Global minimization in few-body systems, *Nuclear Physics* **790**:655–658, 2007.
- 5. <u>C. Voglis</u> and I. E. Lagaris, Towards "Ideal Multistart". A stochastic approach for locating the minima of a continuous function inside a bounded domain. (accepted for publication in *Applied Mathematics and Computation*)
- 6. C. Voglis P. Hadjidoukas, D. Papageorgiou and I. E. Lagaris, A Numerical Differentiation Library Exploiting Parallel Architectures. (accepted for publication in Computer Physics Communications)

Conference Papers

- 7. C. Voglis and S. A. Paschos, A Study on Intrusion Detection Techniques in a TCP/IP Environment, 3th WSEAS International Multiconference on Circuits, Systems, Communications and Computers, Athens, Greece, 1999.
- 8. C. Voglis and I.E. Lagaris, A Hybrid method for neural network training, 6th International Workshop on Mathematical methods in Scattering Theory and Biomedical Engineering, Tsepelovo, Greece, 2004.
- 9. C. Voglis and I. E. Lagaris, A Rectangular Trust Region Dogleg Approach for Unconstrained and Bound Constrained Nonlinear Optimization, WSEAS International Conference on Applied Mathematics, Corfu, Greece, 2004.
- 10. C. Voglis and I. E. Lagaris, A Rectangular Trust-Region Approach for Unconstrained and Box-Constrained Optimization Problems, International Conference of Computational Methods in Sciences and Engineering, Athens, Greece, 2004.
- 11. C. Voglis and I. E. Lagaris, BOXCQP: An Algorithm for Bound Constrained Convex Quadratic Problems, 1st International Conference "From Scientific Computing to Computational Engineering", Athens, Greece, 2004.
- 12. M.G. Tsipouras, <u>C. Voglis</u>, I.E. Lagaris and D.I. Fotiadis, A Framework for Fuzzy Expert System Creation, 7th International Workshop on Mathematical Methods in Scattering Theory and Biomedical Technology, Nymfaio, Greece, 2005.
- 13. C. Papadopoulos and <u>C. Voglis</u> Drawing Graphs using Modular Decomposition, 13th Symposium on Graph Drawing GD2005, Springer LNCS 3843:343–354, 2005.
- 14. M.G. Tsipouras, C. Voglis, I.E. Lagaris, D.I. Fotiadis, Cardiac arrythmia classification using support vector machines, The 3rd European Medical and Biological Engineering Conference, Prague, 2005.
- 15. C. Voglis and I. E. Lagaris, Smeenos: A Clustered Particle Swarm Algorithm for Recovering the Local Minima of a Function, Optimization 2007, Porto, Portugal, 2007.
- 16. C. Voglis and I. E. Lagaris, Global Optimization by Adaptively Estimating the Probability for Local Search, Optimization 2007, Porto, Portugal, 2007.

WORKING EXPERIENCE

2006–2007 Collaborator in the EU Program entitled *Open Source*.

5/2008-7/2008 External Collaborator of Unisystems S.A. on the project Service provider for

the production of cards for Digital Tachographs, Hellenic Ministry of Transport

and Communications.

TEACHING EXPERIENCE

10/1999-6/2007	Teaching assistant in undergraduate courses in Dept. of Computer Science, University of Ioannina.
10/2006-6/2007	Laboratory Assistant, Department of TeleInformatics & Management, Technological Educational Institute of Epirus.
2006	Teaching assistant in the graduate course of Nonlinear Optimization
2007	Teaching assistant in the graduate course of Continuous Global Optimization
9/2007	Assistant supervisor for B.Sc Dissertation entitled $Global\ Optimization\ Using\ Bee\ Colonies$
11/2007	Assistant supervisor for B.Sc Dissertation entitled ${\it Particle~Swarm~Global~Optimization}$
3/2008	Assistant supervisor for B.Sc Dissertation entitled $\it Global~Optimization~Using~Interval~Analysis$
5/2008	Assistant supervisor for M.Sc Dissertation entitled $An\ Application\ of\ Normal\ Distribution\ Sampling\ in\ Global\ Optimization$

Graduate Courses

- ♦ Topics on Database Systems: Models, Languages and Architecture.
- ♦ Topics on Neural Networks and Fuzzy Logic.
- ♦ Optimization.
- ♦ Computer Aided Design: Algorithms and Systems.
- \diamond Topics on Computers Network and Network Programming.
- \diamond Topics on Biomedical Informatics
- ♦ Semantics of Programming Languages.
- ♦ Machine Learning.

PROGRAMMING SKILLS

- $\bullet\,$ Programming in C, Fortran, C++, Java
- Parallel implementation libraries MPI, OpenMP
- Experienced Matlab Development/Modelling
- ASP, PHP

LANGUAGES

Greek Native language English Very good

Hobbies

• Music, Travelling, Soccer.