

## **CURRICULUM VITAE**

### **PERSONAL DETAILS**

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### **DEGREES**

- “Doctorat de l’Université Paul Sabatier de Toulouse in Biometry”, Department of Natural Sciences, University Paul Sabatier – Toulouse III, France (1997)
- PhD. “Doctorat de 3ème cycle in Ecology”, Department of Natural Sciences, University Paul Sabatier – Toulouse III, France (1988)
- Diploma “D.E.A. (Diplome d' Etudes Approfondies)”, «Department of Natural Sciences, University Paul Sabatier – Toulouse III, France (1983)
- Bachelor of Mathematics, Department of Mathematics , University of Athens, Greece (1981)

### **PROFESSIONAL EXPERIENCE**

- May 2004 –  
Professor of Statistics and Quantitative methods, Department of Health & Welfare Units Administration, School of Management and Economics, Technological Educational Institute of Kalamata, Greece.
- November 2000 – Avril 2004  
Associate Professor of Statistics and Quantitative methods, Department of Health & Welfare Units Administration, School of Management and Economics, Technological Educational Institute of Kalamata, Greece.
- 2004-  
Invited Teaching/Research in statistics, for the Master-degree program in Historical Demography, Department of History, Ionian University.
- January 1999 - October 2000  
Visiting Researcher, Department of Electronic and Computer Engineering, Technical University of Crete.
- Mars 1999 – August 1999  
Visiting Lecturer, Department of Agriculture Crop Production and Rural Environment, School of Agricultural Sciences, University of Thessaly
- Mars 1998 - December 1998  
Scientific Collaborator, Center for Intercultural Education, School of Philosophy, University of Athens.
- June 1997 – December 1997  
Visiting Researcher, subcontractor of Department of Electronic and Computer Engineering, Technical University of Crete. Research program “Non-Nuclear Energy (JOULE) EEC project CARE: “Advanced Control Advice for power systems with large

scale integration of Renewable Energy Sources”

- September 1992 – July 1996  
Researcher-Consultant, I.D.E. Environnement S.A., Toulouse, France.
- September 1991- August 1992  
Invited Researcher Laboratory of Quantitative Biology, Department of Natural Sciences, University Paul Sabatier – Toulouse III, France.
- September 1989 – June 1991  
Professor of Statistics and of Ecology, School of Home Economics (Harokopeios), Athens
- December 1988 – May 1989  
Instructor of Applied Informatics, Laboratory of Quantitative Biology, Department of Natural Sciences, University Paul Sabatier – Toulouse III, France.

## RESEARCH PAPERS

### Refereed Publications

1. Dimopoulos I., Lek S., Bourret P.  
**Use of sensitivity indices for choosing networks with better generalization ability.**  
*Neural Processing Letters*, 2(6), 1-4, 1995.
2. Lek S., Belaud A., Dimopoulos I., Lauga J., Moreau J.  
**Improved estimation, using neural networks, of the food consumption of fish populations.**  
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5. Spitz F., Lek S., Dimopoulos I.  
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*Journal of Biological Systems*, vol. 4, no. 3, 433-444, 1996.
6. Lek S., Belaud A., Baran P., Dimopoulos I., Delacoste M.  
**Role of some environmental variables in trout abundance models using neural networks.**  
*Aquatic Living Resource*, 9, 23-29, 1996.
7. Lek S., Dimopoulos I., Fabre A.  
Predicting phosphorous concentration and phosphorous loads from land use watershed characteristics using neural networks.  
*Acta Oecologica*, 17(1), 43-53, 1996.

8. Lek S., Dimopoulos I., Derraz M., El Ghachtoul Y.  
**Rainfall - runoff modeling using artificial neural networks.**  
*Revue des Sciences de l'Eau*, 9(3), 43-55, 1996.
9. Reby D., Lek S., Dimopoulos I., Joachim J., Lauga J., Aulagnier S.  
**Artificial neural networks as a classification method in the behavioural sciences.**  
*Behavioural Processes*, 40, 35-43, 1997.  
(21 αναφορές στη διεθνή βιβλιογραφία)
10. Dimopoulos I., Chronopoulos J., Chronopoulou-Sereli A. and Lek S.  
Neural network models to study relationships between lead concentration in grasses and permanent urban descriptors in Athens city (Greece)  
*Ecological Modeling*, 120, 157-165, 1999.
11. Matsoukis A. S., Chronopoulou-Sereli A., Dimopoulos I. D. and Kamoutsis A.  
**Response of Lantana camara L. subsp. camara to paclobutrazol under different shading levels.**  
*Canadian Journal of Plant Science*, 81, 761-764, 2001
12. Dimopoulos I.F., Tsiros I.X., Serelis K., Kamoutsis A., Chronopoulou A.  
An Application of Parametric and Non-Parametric Models to the Assessment of Fluoride Levels in Vegetation Exposed to Stack Emissions of an Aluminum Reduction Plant in Greece.  
*Journal of the Air & Waste Management Association*, 53 (4): 396-405, 2003
13. Gevrey M., Dimopoulos I., Lek S.  
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*Ecological Modelling*, 160(3), 249-264, 2003.
14. Tsiros I.X. and Dimopoulos I.F.  
A preliminary study on the application of some predictive modelling techniques to assess atmospheric mercury emissions from terrestrial surfaces.  
*Journal of Environmental Science and Health, A*, vol 38, no 11, 2495-2508, 2003.
15. **Kamoutsis A.P., Tsiros I, Dimopoulos Y.D.**  
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16. Dimopoulos I.F., Tsiros I.X., Serelis K., and Chronopoulou A.  
**Combining neural network models to predict spatial patterns of airborne pollutant accumulation in soils around an industrial point emission source**  
*Journal of the Air & Waste Management Association*, 54, 1506-1515, 2004.
17. Gevrey M., Dimopoulos I., Lek S.  
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18. Tsiros I.X. and Dimopoulos I.F.

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21. Chronopoulos K.I., Tsiros I.X., Alvertos N. and Dimopoulos I.F.  
**Estimation of microclimatic data in remote mountainous areas using an artificial neural network model-based approach.**  
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**Refereed International Conferences**

21. Casteras V., Melan C., Gallo A., Dimopoulos I., Corbiere M., Lacoste C., Richard D.  
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23. Dimopoulos I., Lek S., Belaud A.  
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24. Delacoste, M., S. Lek, P. Baran, I. Dimopoulos, and J. L. Giraudel.  
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Edited by J. Ferraris, D. Pelletier and M. J. Rochet. ORSTOM, PARIS (FRANCE) 151-156p., 1996
25. Dimopoulos Y. and Chronopoulou-Sereli A.  
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Πρακτικά 4ου Πανελληνίου Συνεδρίου Μετεωρολογίας-Κλιματολογίας-Φυσικής της Ατμόσφαιρας, 22-25 Σεπτεμβρίου 1998, Αθήνα, 389-396, 1998.
26. Dimopoulos I. F., Kannavou A., Serelis K., Chronopoulou A. and Lek S.

**Estimation of point-source lead distribution by combining artificial neural networks.**

2nd international conference on applications of machine learning to ecological modeling, Adelaide, Australia, 27/11 – 1/12/2000.

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**Statistical Modeling to Estimate Spatial Distribution of Airborne Fluoride in Natural Vegetation Around an Industrial Point Emission Source**  
7<sup>th</sup> Conference on Environmental Science and Technology, Hermoupolis Syros, Greece, September 3<sup>rd</sup> - September 6<sup>th</sup>, 62-69, 2001.
28. Hatziargyriou N.D., Karapidakis E.S., Stavrakakis G.S., Dimopoulos I.F., Kalaitzakis K.  
**Identification of Synchronous Machine Parameters Using Constrained Optimization**  
2001 IEEE Porto Power Tech Proceedings, September 10<sup>th</sup>-13<sup>th</sup>, Porto, Portugal, ISBN 0780371399, 2001.
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**Variables contributions in Artificial Neural Networks to model ecological data: Review and comparison of Methods.**  
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**The combined effect of micrometeorological parameters and the growth regulator paclobutrazol on gardenia plants (*Gardenia jasminoides* Ellis)**  
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**A new approach to determine the significance of the two-way interaction in an artificial neural network model.**  
3rd Conference of the International Society for Ecological Informatics, Rome, Italy, 26-30 August, 2002.
33. Papoutsis I., Dimopoulos I.  
**Computerized tools for improving Quality and Cost Outcomes in Healthcare Units**  
1<sup>st</sup> International Conference on Health Economics and Health Management, Athens, 29-30 May, Athens, 2002.
34. Kasimatis K., Katalifou A., Dimopoulos I. F.  
**SELETE and TEI students' beliefs and attitudes to Mathematics: Preparatory stage.**  
3<sup>rd</sup> Mediterranean Conference on Mathematical Education, Athens, Greece, 3-5 January, 2003.

35. Dimopoulos I.F., Chronopoulos K.I., Alvertos N., Tsiros I.X.  
**A preliminary study of meteorological parameters at Samaria Gorge (Crete, Greece) using statistical and artificial neural network methods.**  
 9<sup>th</sup> International Conference on Environmental Science and Technology, 9CEST – Rhodes, 2005
36. Tsiros I., Dimopoulos I., Zakikhani M., Harrelson D., Droulia F.  
**A comparative study of model algorithms for predicting soil thermal regime and climatic water budget of agricultural watersheds.**  
 8<sup>th</sup> Conference on Meteorology-Climatology-Atmospheric Physics, COMECAP 2006, Athens, May 24-26 2006.
37. Chronopoulos K.I., Dimopoulos I.F., Tsiros I.X., Alvertos N.  
**Estimation of micrometeorological parameters at gnarled regions using statistical methods and neural networks estimation of forest fire risk index.**  
 8<sup>th</sup> Conference on Meteorology-Climatology-Atmospheric Physics, COMECAP 2006, Athens, May 24-26 2006.
38. Paschalidis C., Kavvadias V., Dimopoulos I., Vavoulidou E., Chasaneas N.  
**Effect of soil water content and type of nitrogenous fertilizer on growth and yield of onion (*Allium cepa* L.) and on availability of nutrients in plant and soil.**  
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39. Chronopoulos K., Tsiros I., Alvertos N., Shashua-Bar L. and Dimopoulos I.  
**An application of artificial neural network models for estimating values of meteorological and biometeorological parameters in the urban canopy layer**  
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- Chu H-J. and Chang L-C.  
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- Park, Y.-S., Chon, T.-S  
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- Mouton A M., Dedecker A. P., Lek S., Goethals P.L.M.  
Selecting Variables for Habitat Suitability of Asellus (Crustacea, Isopoda) by Applying Input Variable Contribution Methods to Artificial Neural Network Models  
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- Reddy N.S., Dzhebyan I., Lee J.S. and Koo Y.M.  
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ISIJ International, Vol. 50 (2010), No. 2, pp. 279–285

## P3 (7 references)

For instance

- Moatar F, Fessant F, Poirel A.  
pH modelling by neural networks. Application of control and validation data series in the Middle Loire river  
ECOL MODEL 120 (2-3): 141-156 AUG 17 1999
- Coulibaly P, Ancil F, Bobee B.  
Hydrological forecasting with artificial neural networks: The state of the art  
CAN J CIVIL ENG 26 (3): 293-304 JUN 1999
- Schreider SY, Young PC, Jakeman AJ  
An application of the Kalman filtering technique for streamflow forecasting in the Upper Murray Basin  
MATH COMPUT MODEL 33 (6-7): 733-743 MAR-APR 2001
- Gaume E, Gosset R  
Over-parameterisation, a major obstacle to the use of artificial neural networks in hydrology  
HYDROL EARTH SYST SC 7 (5): 693-706 OCT 2003
- Riad S., Mania J., Bouchaou L., Najjar Y.  
Predicting catchment flow in a semi-arid region via an artificial neural network technique  
HYDROLOGICAL PROCESSES, 18, 2387–2393, 2004

## P4 (177 references)

For instance

- Kim, C.-K., Lee, H.-S, Lee, D.  
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Lecture Notes in Control and Information Sciences, Volume 345, 2006, Pages 976-981

- Mandal S., Sivaprasad P V, Venugopal S and Murthy K P N  
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Supervised neural network recognition of habitat zones of rice invertebrates  
Stochastic Environmental Research and Risk Assessment, Volume 21, Issue 6, 2007, 729-735
- Zheng X., Liu M.  
An overview of accident forecasting methodologies  
Journal of Loss Prevention in the Process Industries, Volume 22, Issue 4, July 2009, Pages 484-491
- Merdun, H., Çınar, Ö.  
Artificial neural network and regression techniques in modelling surface water quality  
Environment Protection Engineering 36 (2), pp. 95-109, 2010

#### P5 (3 references)

- Verdonschot P.F.M & Nijboer R.C. (eds.)  
Predicting Aquatic Ecosystem Quality using Artificial Neural Networks: Impact of Environmental characteristics on the Structure of Aquatic Communities (Algae, Benthic and Fish Fauna)  
Wageningen, Alterra, Green World Research, Alterra-rapport 517. 92 pp, 2002, EUROPEAN COMMISSION, RESEARCH DIRECTORATE-GENERAL, ISSN 1566-7197
- Tirelli, T., Pessani, D.  
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#### P6 (34 references)

For instance

- Birks HJB  
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Fisheries Research, Volume 86, Issue 2-3, 2007, 120-128
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*Predicting Aquatic Ecosystem Quality using Artificial Neural Networks: Impact of Environmental characteristics on the Structure of Aquatic Communities (Algae, Benthic and Fish Fauna).* Wageningen, Alterra, Green World Research, Alterra-rapport 517. 92 pp, 2002, EUROPEAN COMMISSION, RESEARCH DIRECTORATE-GENERAL, ISSN 1566-7197
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