Georgios G. Tziralis

contacts, offline
14-16 Meletiou Vasileiou Str
11745 Athens, Greece
(+30) 6937-122-065

contacts, online
gtziralis@gmail.com
http://gtziralis.com

Education

PhD Candidate   Autumn 2004 - today

National Technical University of Athens, School of Mechanical Engineering, Sector of Industrial Management and Operations Research
- Thesis Title (draft): *A market approach to forecasting: Theory, experiments and practice*
- Advisor: Prof. Ilias Tatsiopoulos
- Research Interests: Prediction Markets, Forecasting, Prediction Algorithms, Machine Learning, Data Mining, Web Development, Time Series Forecasting, Econometrics and Uncertainty Modeling

Diploma in Mechanical Engineering,   Autumn 1999 - Summer 2004
(5-year Bachelor degree, MSc equivalent)

National Technical University of Athens, School of Mechanical Engineering
- Specialization: Industrial Engineering and Operations Research
- Grade Point Average 7.2 out of 10 (top 10%)
- Thesis Title: *Attempts to Forecast Future Stock Prices and Determine Investors Risk Using Neural Networks and Monte Carlo Simulation*
- Advisor: Prof. Georgios Kosmetatos
- Thesis Grade: 10 out of 10
- Research Interests: Operations Research, Forecasting and Risk Management Methods, Managerial Economics

Publications

In refereed international journals

- Tziralis G. and Tatsiopoulos I., 'Prediction Markets: An Extended Literature Review', *The Journal of Prediction Markets* (2007), Vol. 1, pp. 7591

- Tziralis G. and Tatsiopoulos I., 'Prediction Markets: An Information Aggregation Perspective to the Forecasting Problem', *World Review of Entrepreneurship, Management and Sustainable Development*, Vol. 3, No.3-4, pp. 251-259

- Rentizelas A., Tziralis G. and Kirytopoulos K., 'Incorporating Uncertainty on Optimal Investment Decisions', *World Review of Entrepreneurship, Management and Sustainable Development*, Vol. 3, No.3-4, pp. 273-283

- Tziralis G., Tolis A., Tatsiopoulos I. and Aravossis K., 'Sustainability and the Olympics: The Case of Athens 2004', International Journal of Sustainable Development and Planning, Special Issue: Environmental Economics, in press

In conference proceedings

- Tziralis G. and Tatsiopoulos I., 'Prediction Markets: Aspects on Transforming a Business Game into a Valuable Information Aggregation Tool', *Proceedings of the 3rd Future Business Technology Conference*, 17-19 April 2006, Athens, Greece, pp. 35-39.

- Rentizelas A., Tziralis G., Kirytopoulos K., Leopoulos V. and Tatsiopoulos I., 'A Hybrid Approach to Investment Decisions through Genetic Algorithm Optimization & Monte Carlo Simulation', *Proceedings of the 14th International Working Seminar on Production Economics*, Innsbruck, Austria, 20-24 February 2006, Vol.2, pp. 397-406

- Tziralis G., Tolis A., Tatsiopoulos I. and Aravossis K., 'Economic Aspects and Sustainability Impact of the Athens 2004 Olympic Games', *Proceedings of 1st International Conference on Environmental Economics and Investment Assessment*, 13-15 September 2006, Mykonos, Greece, pp. 21-34

- Rentizelas A., Tziralis G. and Kirytopoulos K., 'An Integrative Approach to Investment Appraisal: Simulating the Risk of an Optimum Decision', *Proceedings of the 3rd Future Business Technology Conference*, 17-19 April 2006, Athens, Greece, pp. 27-32.

- Tziralis G. and Tatsiopoulos I., 'Prediction Markets as Decision Support Tool for Supply Chain Management', *Bulletin of the Hellenic Association of Mechanical and Electrical Engineers*, November 2007, pp. 52-56 (in greek)

- Tziralis G. and Tatsiopoulos I., 'On prediction markets', 18th National Conference of Hellenic Operational Research Society, 15-17 June 2006, Kozani, Greece, in press (in greek)

- Rentizelas A., Kirytopoulos K. and Tziralis G., 'Strategic Investment Decisions for Renewable Energy Sources, based on Risk Management', Proceedings of 17th National Conference of Hellenic Operational Research Society, 16-18 June 2005, Rio-Patras, Greece, in press

- Kirytopoulos K., Rentizelas A. and Tziralis G., 'On Quantifying Uncertainty for Project Selection: The Case of a Renewable Energy Sources Investment', Proceedings of the World Renewable Energy and Environment Conference (WREEC) 2006, Tripoli, Libya

Academic Projects	**Olympic Games Global Impact** - The Athens 2004 Olympic Games	Autumn 2004 - Spring 2007

- Impact assessment of the Athens 2004 Olympic Games
- Employer: Sector of Industrial Management and Operational Research, National Technical University of Athens under the supervision of Hellenic Ministry of Culture and International Olympic Committee
- Occupation: Chief researcher, commissioned with the spheres of economy and tourism

Teaching & Courses

Data Mining Algorithms

- Context: A course for the post-graduate program 'Applied Mathematical Sciences' of the School of Applied Mathematics and Physics, National Technical University of Athens
- Tasks assigned: Teaching Instructor
- Course contents: Attribute selection, filters, validation (holdout, stratification, cross-validation, bootstrap), classification rules, decision trees, naive Bayes, instance-based representation, association rules, neural networks, support vector machines, bagging, boosting, stacking, implementation in Weka

Introduction to Forecasting

- Context: A couple of lectures taught at the undergraduate course 'Logistics', School of Mechanical Engineering, National Technical University of Athens
- Tasks assigned: Teaching Instructor
- Lectures contents: Definition and terminology, applications, implications in logistics chain and decision support, classification of available tehniques, judgmental and causal methods, quick introduction to econometrics (covariance and correlation coefficient, regression, R^2 coefficient, implementation in MS Excel), quick introduction to time-series analysis (time-series modeling and decomposition -trend, seasonality and randomness-, smoothing and moving averages, Holt-Winters model, errors, covariance, autocorrelation and stationarity, implementation in MS Excel), introduction to neural networks, implementation in Matlab

Introduction to Data Mining: From Data to Knowledge

- Context: A lecture taught at the undergraduate course 'Management Information Systems', School of Mechanical Engineering, National Technical University of Athens and at the same titled course of 'Athens MBA', a joint effort of National Technical University of Athens and Athens University of Economics and Business
- Tasks assigned: Teaching Instructor
- Lecture contents: knowledge management and the need for data mining in the modern enterprise, definition and the process from data to information to knowledge, patterns, case studies, concepts, instances and attributes, classification, association, clustering and numeric prediction, supervised and unsupervised algorithms, data transformations, trial & error, decision tables, trees and rules, association rules, linear regression, instance-based representation and clusters, training and testing, cross-validation, bagging, boosting and stacking, introduction to and demonstration of Weka

Professional Activities	- Co-founder & CEO at **askmarkets.com**, 'a prediction markets platform for hosting the wisdom of crowds' - Initiator and principal organizer of Open Coffee Club meetings in Athens and Thessaloniki, Greece ('the place for greek start-up', web reference: http://opencoffee.gr) - Chief Operating Officer and evangelist at the Greek Federation of Junior Enterprises 'Jade Hellas' (web reference: http://jadehellas.eu)
Professional Affiliations	- Member of Technical Chamber of Greece - Member of Hellenic Operational Research Society
Professional Activities	(during early student years) - Supervision of Building Management System 'Desigo' for the Main Press Center of the Olympic Games 2004 (under Siemens Hellas and Athens 2004 Olympic Games Organising Committee) - NBC Olympics, Television coverage of the Athens 2004 Olympic Games - 3 summer internships in Public Power Corporation of Greece, Research Department - Supervisor of marketing, sales promotion and advertisement acts, Innovation S.A.

| **Computer Skills** | Languages: | Ruby, HTML, CSS, LaTeX, Matlab, Mathematica (advanced), Javascript, SQL, Fortran, Pascal (intermediate) |
| | Software: | Weka, Yale, SAS, SPSS, Wordpress, Textmate, Aptana, Eclipse, Netbeans, Dreamweaver, @Risk, MathCad, AutoCad, Photoshop, ... |

Other Interests

- The web at large
- Macs
- Fitness
- Argentine tango