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PERSONAL INFORMATION

First Name: Fragkiskos
Last Name: Malliaros
Father's Name: Dimitrios

Date of Birth: November 7, 1985
Place of Birth: Sparta, Greece

RESEARCH INTERESTS

Data mining (in general), graph mining, social network analysis, databases, design and analysis of algorithms

EDUCATION

University of Patras, Patras, Greece

- MSc Student in Computer Science & Engineering, Oct. 2009 - present
Advisor: Vasileios Megalooikonomou, Associate Professor
- Diploma in Computer Engineering and Informatics, Oct. 2004 - July 2009
Thesis title: "Parameter-free data mining techniques"
Advisor: Vasileios Megalooikonomou, Associate Professor
GPA: 8.26/10.0

High School of Kastorio Laconias, 2003

Graduated with GPA 18.4/20

ACADEMIC EXPERIENCE

Computer Engineering and Informatics Dept., University of Patras, Greece

Research

- **Diploma Thesis** **September 2008 - July 2009**
Title: *Parameter-free data mining techniques*
Most data mining algorithms require from the user the setting of many input parameters (i.e. the k -means clustering algorithm requires a value for k). This may cause several problems to the execution and evaluation of the algorithm (i.e. the algorithm may be unable to detect real patterns in the data because of the wrong selection of the parameters). In this thesis, we study a technique that has been proposed in the data mining community for designing parameter-free data mining algorithms. It is based on information theory and compression principles and more precisely in the Minimum Description Length principle. This methodology has been applied to various data mining problems like co-clustering, spatial clustering, graph partitioning. We propose a unification of the method's variations, in order to create a parameter-free data mining framework. Moreover, we check the ability of the method to deal with non-binary data, which require a preprocessing step. Finally, we present experiments on multiple synthetic and real datasets.

Teaching/Working

- **Teaching assistant** **October 2009 - February 2010**
Databases I
Advisor: Vasileios Megalooikonomou, Associate Professor
- **Teaching assistant** **February 2007 - June 2007**
Undergraduate laboratory of "Digital Design"
Advisor: Alexiou George, Professor

PUBLICATIONS **Fragkiskos Malliaros** and Vasileios Megalooikonomou. Parameter-free data mining techniques. In *EUREKA '09: 3rd Panhellenic Scientific Student Conference on Informatics, Related Technologies and Applications*, Corfu, Greece, 2009.

AWARDS / HONORS Greek State Scholarships Foundation (IKY)

- Award (€1,450) for ranking 3rd out of approx. 270 students in the academic year 2007-08 (4th year of my studies)

Dept. of Computer Engineering and Informatics, University of Patras

- Ranking 4th out of approx. 270 students in the academic year 2006-07 (3rd year of my studies)

Eurobank EFG Group, "Great Moment for Education" program

- Award for achieving the highest grade of my school at the pan-Hellenic university admission examinations (2003)

Greek Ministry of Education

- Greek Ministry of Education awards for excellence in high school (1997-2003)

TECHNICAL SKILLS **Operating Systems:** Unix/Linux, Windows

Programming Languages: C, C++ (Libraries: STL, LEDA, Boost), Python, Java, Matlab, LISP, CLIPS, Assembly (PIC microcontroller), HTML, MySQL, PHP

Computer Networks: Basic knowledge of Cisco IOS software

Applications: \LaTeX and other common productivity packages for Linux and Windows platforms

CONFERENCES / SEMINARS ATTENDED *Conferences*

- 3rd Panhellenic Scientific Student Conference on Informatics, Related Technologies and Applications (EUREKA 2009), September 10-12, 2009, Corfu, Greece
- 13th Panhellenic Conference on Informatics (PCI 2009), September 10-12, 2009, Corfu, Greece
- 1st Open Source Software Communities Conference, March 21-22, 2008, National Technical University of Athens, Greece
- 11th Panhellenic Conference on Informatics (PCI 2007), May 18-20, 2007, Patras, Greece
- 1st Panhellenic Scientific Student Conference on Informatics, Related Technologies and Applications (EUREKA 2007), May 18-20, 2007, Patras, Greece
- Conference exhibition event with subject: "Dept. of Computer Engineering and Informatics: Pioneering in Informatics, Research, Development, Innovation, Utilization of technologies in society", December 9-10, 2006, University of Patras, Greece

Seminars

- Computer Engineering and Informatics Dept. Seminars, University of Patras, 2008-2009, Patras, Greece
- Seminar on developing MS-Windows applications with C# and .NET, organized by the University of Patras IEEE Student Branch and Microsoft Hellas, March 15, 2006, University of Patras, Greece

REFERENCES

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