Alin V. Dobra

1822 Dryden Rd Apt. 2
Freeville, NY 13068
Tel: 607-591-1546
Fax: 607-255-4428
dobra@cs.cornell.edu
www.cs.cornell.edu/people/dobra

Objective	Tenure-track Assistant Professor at a strong research university.
Research Interest	Databases, Data-mining, Approximate Query Processing, Data Streaming Algorithms, Scalable Classification and Regression Tree Construction, Machine Learning, Statistics.

Education

Cornell University, Ithaca, NY
PhD, Computer Science, August 2003 (expected)
Advisor: Prof Johannes Gehrke
Dissertation Title: Scalable Classification and Regression Tree Construction
MSc, Computer Science, December 2001

Technical University of Cluj-Napoca, Cluj-Napoca, Romania
BSc, Computer Science, July 1998

Publications

Refereed Conferences

Alin Dobra and J. E. Gehrke. *SECRET: A Scalable Linear Regression Tree Algorithm.* In Proceedings of the Eighth ACM SIGKDD International Conference on Knowledge Discovery and Data Mining. Edmonton, Alberta, Canada, July 2002.

Alin Dobra, Minos Garofalakis, J. E. Gehrke, and Rajeev Rastogi. *Processing Complex Aggregate Queries over Data Streams.* In Proceedings of the 2002 ACM Sigmod International Conference on Management of Data, Madison, Wisconsin, June 2002.

Alin Dobra and J. E. Gehrke. *Bias Correction in Classification Tree Construction.* In Proceedings of the Seventeenth International Conference on Machine Learning (ICML 2001), Williams College, Massachusetts, June 2001.

Alin Dobra. *Identification of fuzzy models using clustering techniques.* National Conference on Automatic Control and Testing, Cluj-Napoca, Romania, 1996.

Dorin Isoc, Alin Dobra. *A new philosophy and adequate dedicated software tool to implement fuzzy logic systems*, International Conference on Technical Information, Timişoara, Romania, 1994.

Under review

Alin Dobra, Minos Garofalakis, J. E. Gehrke, and Rajeev Rastogi. *Sketch-Based Multi-Query Processing over Data Streams.*

Other

Alin Dobra. *Function Approximation using Fuzzy Clustering*, Technical University of Cluj-Napoca, Graduation Thesis (in Romanian), 1998.

Research

Department of Computer Science, Cornell University
Graduate Research Assistant   2000-present
Investigated statistics based methods for *scalable classification and regression tree construction* under the supervision of Prof. Johannes Gehrke.

Internet Management Research Department
Bell-Labs, Lucent Technologies
Summer Intern   2001-present
Developed randomized algorithms for *approximating the results of aggregate SQL queries over streaming data* together with Dr. Rajeev Rastogi and Dr. Minos Garofalakis. I continued this work at Cornell with Prof. Johannes Gehrke.

Department of Computer Science, Cornell University
Graduate Research Assistant   1999
Improved the performance of `blackbox`, a tool for *satisfiability and planning* under the supervision of Prof. Bart Selman.

Department of Computer Science
Technical University of Cluj-Napoca
Research Assistant   1997
Designed *Venice Optimizing Compiler* for a C-like language under the supervision of Prof. Liviu Negrescu.

School of Automation and Computer Engineering
Technical University of Cluj-Napoca
Research Assistant   1993–1995
Designed *Fuzzy Logic Systems* under the supervision of Prof. Dorin Isoc and applied them to automation and control problems.

Teaching

Recitation/Project Instructor. *Practicum in Operating Systems(Spring 2002)*: responsible for preparing and grading 6 mini-projects, giving recitations and assisting students with project work . The course consists in implementing a operating system using PortOS, an educational operating system framework to which I contributed.

Teaching Assistant. *Foundations of Artificial Intelligence (Fall 1998, Fall 1999), Machine Learning (Spring 2000)*: responsible for grading homework assignments and exams, holding office hours and coordinating the other teaching assistants.

Guest or Substitute Lecturer. *Foundations of Artificial Intelligence (Fall 1999), Machine Learning (Spring 2000), Systems Programming and Operating Systems(Spring 2002)*.

Professional Activities

- *Conference Reviewer:* ICDE 2002, KDD 2002, SIAM 2003
- *Journal Reviewer:* IBM Systems Journal, TKDE Journal

Additional Experience

- Administered several Linux servers and helped provide email and Internet access to about 100 users (1998).
- Designed an application for hotel administration and another for the control of production and managing of temporary import inventory (1995).

Awards

Four prizes, including First Prize(1993), at the National Olympiad of Physics and member of the Romanian Olympic Team of Physics (1988-1993).

Skills

- Proficient in the major programming languages, web, network, open–source and database technologies, operating systems and desktop applications.
- Fluent in English and Romanian, basic French.

Personal

Enjoy reading, driving, playing computer games and tennis.

References

Prof. Johannes Gehrke
Department of Computer Science
Cornell University
4105B Upson Hall
Ithaca, NY 14853
`johannes@cs.cornell.edu`
Voice: 607 255-1045
Fax: 607 255-4428

Prof. Claire Cardie
Department of Computer Science
Cornell University
5161 Upson Hall
Ithaca, NY 14853
`cardie@cs.cornell.edu`
Voice: 607 255-9206
Fax: 607 255-4428

Dr. Rajeev Rastogi
Information Sciences Research Center
Bell Laboratories
Rm 2B-301, 600 Mountain Avenue
Murray Hill, NJ 07974, USA
`rastogi@bell-labs.com`
Voice: 908 582-3728
Fax: 908 582-1239

Prof. Emin Gün Sirer
Department of Computer Science
Cornell University
4119A Upson Hall
Ithaca, NY 14853
`egs@cs.cornell.edu`
Voice: 607 255-7673
Fax: 607 255-4428

Dr. Minos N. Garofalakis
Information Sciences Research Center
Bell Laboratories
Rm 2B-305, 600 Mountain Avenue
Murray Hill, NJ 07974, USA
`minos@research.bell-labs.com`
Voice: 908 582-1723
Fax: 908 582-1239