

Ali Civril

CONTACT INFORMATION

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RESEARCH INTERESTS

Information visualization, approximation algorithms, algorithmic aspects of linear algebra and its applications to data mining

EDUCATION

Rensselaer Polytechnic Institute, Troy, New York USA

Ph.D. Candidate, Computer Science (December 2009 expected) cGPA: 3.85/4.00

- Advisor: *Malik Magdon-Ismail*
- Courses: *Programming Languages, Computer Operating Systems, Advanced Probability for Statistical Inference, Analysis of Algorithms, Applied Multivariate Analysis, Machine Learning, Combinatorial Optimization and Integer Programming, Randomized Algorithms, Advanced Algorithm Design, Introduction to Topology, Distributed Algorithms and Systems, Nonlinear Programming, Linear Programming.*

Rensselaer Polytechnic Institute, Troy, New York USA

M.S., Computer Science (December 2007)

- Advisor: *Malik Magdon-Ismail*

Bilkent University, Ankara, Turkey

B.S., Computer Engineering (September 2000 - May 2004) cGPA: 3.84/4.00, 5th/100+

WORK

SoftArtisans, Inc., Watertown, MA USA

Summer Intern Development (June 2007 - August 2007)

- Work done: Designed and implemented a file transfer protocol over HTTP, which will be a part of a third party software that runs on Blackberry and WindowsMobile.

AT&T Labs, Inc., Florham Park, NJ USA

Summer Intern in Information Visualization Lab (June 2007 - August 2007)

- Work done: Designed and implemented a new graph drawing algorithm to enhance the widely used graph drawing package Graphviz of AT&T.

Bilkent University, Ankara, Turkey

Summer Intern in Department of Computer Engineering, Center for Bioinformatics (June 2003 - July 2003)

- Work done: Improved the visualization and graph drawing capabilities of the large scale biological pathway analysis software PATIKA, written under Java.

HONORS AND AWARDS

Top 0.1 % in nationwide university entrance exam (Full scholarship awarded by Bilkent University), 2000

7th Turkish National Math Olympiad, Silver Medal (participated the IMO team selection exam),

1999

7th Turkish National Informatics Olympiad, regional 2nd place, 1999

Top 0.1 % in nationwide Science High school entrance exam, 1997

2nd Turkish Secondary School Math Olympiad, Bronze Medal, 1997

PUBLICATIONS

A. Çivril and M. Magdon-Ismael, *On Selecting a Maximum Volume Sub-matrix of a Matrix and Related Problems*, (to appear in *Theoretical Computer Science*).

U. Dogrusoz, E. Giral, A. Cetintas, A. Civril, and E. Demir, *A Layout Algorithm For Undirected Compound Graphs*, Information Sciences, 179, pp. 980-994, 2009.

A. Çivril and M. Magdon-Ismael, *Deterministic Sparse Column Based Matrix Reconstruction via Greedy Approximation of SVD*, 19th International Symposium on Algorithms and Computation (ISAAC 2008), Gold Coast, Australia, December 15-17, 2008. (journal version submitted)

Yehuda Koren and A. Çivril, *The Binary Stress Model for Graph Drawing*, 16th International Symposium on Graph Drawing (GD 2008), Heraklion, Crete, Greece, Sept 21-24, 2008.

A. Çivril, M. Magdon-Ismael and E. Bocek-Rivele, *SSDE: Fast Graph Drawing Using Sampled Spectral Distance Embedding*, 14th International Symposium on Graph Drawing (GD 2006), Karlsruhe, Germany, Sept 18-20, 2006.

A. Civril, M. Magdon-Ismael and E. Bocek-Rivele, *SDE: Graph Drawing Using Spectral Distance Embedding*, 13th International Symposium on Graph Drawing (GD 2005), Limerick, Ireland, Sept 12-14, 2005. (poster presentation)

U. Dogrusoz, E. Giral, A. Cetintas, A. Civril, and E. Demir, *A Compound Graph Layout Algorithm for Biological Pathways*, 12th International Symposium on Graph Drawing (GD 2004), NYC, NY, Sept. 29-Oct. 2, 2004.

TEACHING

Rensselaer Polytechnic Institute, Troy, New York USA

Teaching Assistant

August, 2004 - October, 2006

Grading and labs.

- Problem Solving in Computer Science Using C++, Fall 2006.
- Data Structures and Algorithms, Spring 2005
- Programming in Java, Fall 2005

Bilkent University, Ankara, Turkey

Tutor and private lecturer

September, 2002 - May, 2004

Grading, labs and recitations.

- Introduction to Object Oriented Programming I, Spring 2004.
- Algorithms and Programming I, Spring 2003
- Calculus I, Fall 2003

COMPUTER SKILLS

- Languages: Java(fluent), C++(fluent), Pascal
- Applications: JBuilder, JIdea, Visual Studio .NET, Matlab, MiniTab
- Operating Systems: Unix/Linux, Windows.