Anastasios Sidiropoulos

Curriculum Vitae

MIT Computer Science and Artificial Intelligence Lab
32 Vassar Street, Room 32G-608
Cambridge, MA 02139
USA

Tel: +1-617-820-7152
tasos@mit.edu
http://www.mit.edu/∼tasos
Greek Citizenship

Research Interests Approximation Algorithms, Geometric Algorithms, Streaming Algorithms, Discrete Mathematics, Graph Theory, Complexity Theory, Randomized Algorithms, Topological Methods in Discrete Mathematics.

Education

- 2005-present, Massachusetts Institute of Technology. Ph.D in Computer Science.
  Expected date of graduation: June 2008.
  Advisor: Piotr Indyk
- 2003-2005, Massachusetts Institute of Technology. MSc in Computer Science.
  Advisor: Piotr Indyk
- 1997-2002, University of Patras, Greece. Diploma in Computer Engineering & Informatics.
  Advisor: Christos Kaklamanis

Work Experience

- Summer 2006 and summer 2007, Internship at Google Inc., New York, NY.
  Host: Jon Feldman

Teaching Experience

- Spring semester 2006-2007, Teaching assistant in MIT, *Geometric Computing*.
  Instructor: professor Piotr Indyk (E-mail: indyk@theory.csail.mit.edu).
- Fall semester 2005-2006, Teaching assistant in MIT, *Advanced Algorithms*.
  Instructor: professor David Karger (E-mail: karger@theory.csail.mit.edu).
- Spring semester 1999-2000, Undergraduate Teaching Assistant in the University of Patras, *Computer Architecture Laboratory*.
  Instructor: professor D. Nikolos (E-mail: nikolosd@ceid.upatras.gr).

Publications

- Krzysztof Onak, Anastasios Sidiropoulos.
  Circular Partitions with Applications to Visualization and Embeddings.
  In Proc. of the 24th Annual ACM Symposium on Computational Geometry (SoCG 2008).
- Jon Feldman, S. Muthukrishnan, Anastasios Sidiropoulos, Cliff Stein, Zoya Svitkina.
  On Distributing Symmetric Streaming Computations.
  In Proc. of the 19th ACM-SIAM Symposium on Discrete Algorithms (SODA 2008), to appear.
- Piotr Indyk, Anastasios Sidiropoulos.
  Probabilistic Embeddings of Bounded Genus Graphs Into Planar Graphs.
  In Proc. of the 23rd Annual ACM Symposium on Computational Geometry (SoCG 2007).

- Mihai Badoiu, Piotr Indyk, and Anastasios Sidiropoulos.
Approximation Algorithms for Embedding General Metrics Into Trees.
In Proc. of the 18th ACM-SIAM Symposium on Discrete Algorithms (SODA 2007).

- Mihai Badoiu, Julia Chuzhoy, Piotr Indyk, and Anastasios Sidiropoulos.
Embedding Ultrametrics Into Low-Dimensional Spaces.
In Proc. of the 22nd Annual ACM Symposium on Computational Geometry (SoCG 2006).

- George Christodoulou, Vahab S. Mirrokni, and Anastasios Sidiropoulos.
Convergence and Approximation in Potential Games.
In Proc. of the 23rd Symposium on Theoretical Aspects of Computer Science (STACS 2006).

- Mihai Badoiu, Julia Chuzhoy, Piotr Indyk, and Anastasios Sidiropoulos.
Low-Distortion Embeddings of General Metrics Into the Line.
In Proc. of the ACM Symposium on Theory of Computing (STOC 2005).

- Noga Alon, Mihai Badoiu, Erik Demaine, Martin Farach-Colton, MohammadTaghi Hajiaghayi, and Anastasios Sidiropoulos.
Ordinal Embeddings of Minimum Relaxation: General Properties, Trees, and Ultrametrics.
In Proc. of the ACM-SIAM Symposium on Discrete Algorithms (SODA 2005).
Journal version: ACM Transactions on Algorithms, to appear.

- Mihai Badoiu, Kedar Dhamdhere, Anupam Gupta, Yuri Rabinovich, Harald Raecke, R. Ravi, and Anastasios Sidiropoulos.
Approximation Algorithms for Low-Distortion Embeddings Into Low-Dimensional Spaces.
In Proc. of the ACM-SIAM Symposium on Discrete Algorithms (SODA 2005).

- Ioannis Caragiannis, Christos Kaklamanis, Pino Persiano, and Anastasios Sidiropoulos.
Fractional and Integral Coloring of Locally-Symmetric Sets of Paths on Binary Trees.
In Proc. of the 1st Workshop on Approximation and On-line Algorithms (WAOA 2003), LNCS 2909, Springer, pp. 81-94, 2003.

Submitted Manuscripts

- Anastasios Sidiropoulos.
On the Computational Near-Optimality of Random Projection.

- Christiane Lammersen, Anastasios Sidiropoulos and Christian Sohler.
Streaming Embeddings with Slack.

- Mihai Badoiu, Erik Demaine, MohammadTaghi Hajiaghayi, Anastasios Sidiropoulos, Morteza Zadimoghaddam.
Ordinal Embedding: Approximation Algorithms and Dimensionality Reduction.

Fellowships and Awards

- 2003-2005 (1st–2nd year of graduate studies) Fellowship of the Alexandros S. Onassis Public Benefit Foundation.

- 2003-2004 (1st year of graduate studies) Paris Kanellakis Fellowship.

- 2002 Ranked 1st among all students of the School of Engineering (5 Departments) of the University of Patras, who graduated in November 2002.

- 1999-2002 (3rd–5th year of undergraduate studies) Scholarship Beneficiary of Greek National Scholarship Foundation (IKY) for superior academic performance.

- 1995 Bronze medal in the 5th Balkan Olympiad in Informatics.
- 1995 Member of the Greek team in the 7th International Olympiad in Informatics.
- 1995 2nd place in the Greek Olympiad in Informatics.

Recommendations

- **Erik Demaine**
  Associate Professor of Computer Science, Massachusetts Institute of Technology.
  32 Vassar Street, Room G680
  Cambridge, MA 02139
  Phone: (617) 253-6871
  Fax: (617) 258-8682
  E-mail: edemaine@mit.edu
- **Jon Feldman**
  Research Scientist at Google, Inc., NY.
  76 Ninth Avenue, 4th Floor
  New York, NY 10011
  E-mail: jonfeld@ieor.columbia.edu
- **Piotr Indyk**
  Associate Professor of Computer Science, Massachusetts Institute of Technology.
  32 Vassar Street, Room G642
  Cambridge, MA 02139
  Phone: (617) 452-3402
  Fax: (617) 258-8682
  E-mail: indyk@theory.csail.mit.edu
- **S. Muthu Muthukrishnan**
  Professor of Computer Science, Rutgers University.
  110 Frelinghuysen Rd., 319 Core Bldg.
  Piscataway, NJ 08854
  Phone: (732) 445-2379
  Fax: (732) 445-0537
  E-mail: muthu@cs.rutgers.edu
- **Clifford Stein**
  Professor of Industrial Engineering and Operations Research, Columbia University.
  500 W. 120 St., MC 4704
  New York, NY 10027
  Phone: (212) 854-5238
  Fax: (212) 854-8103
  E-mail: cliff@ieor.columbia.edu