

CHARALAMPOS (BABI) PAPAMANTHOU
CURRICULUM VITAE
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RESEARCH INTERESTS

- Computer and Information Security (Authenticated Data Structures, Storage Authentication), Cryptography
- Computational Geometry, Algorithmic Aspects of Sensor Networks, Design and Analysis of Algorithms

EDUCATION

Brown University, Providence RI, U.S.A.

Ph.D. candidate in Computer Science (since Sep. 2005)

Brown University, Providence RI, U.S.A.

M.Sc., Computer Science

May 2007

University of Crete, Heraklion, Greece

M.Sc., Computer Science

July 2005

University of Macedonia, Thessaloniki, Greece

B.Sc., Applied Informatics

June 2003

PROFESSIONAL EXPERIENCE

Intel Inc., Berkeley CA

Research intern

June 2008 – August 2008

Brown University, Providence RI

Research assistant (with R. Tamassia and F. P. Preparata)

Jan. 2006 – Present

IAM Technology Inc., Providence RI

Researcher (with D. Croston, CEO)

Jan. 2006 – Present

University of Crete and FO.R.T.H., Heraklion, Greece

Research assistant (with I. G. Tollis)

Sep. 2003 – Sep. 2005

TEACHING EXPERIENCE

Computer Science Department, Brown University Graduate teaching assistant for:

CS166 (Introduction to Computer Systems Security)

Spring 2007

Computer Science Department, University of Crete Graduate teaching assistant for:

CS380 (Algorithms and Complexity)

Spring 2004

CS483 (Graph Algorithms)

Fall 2004

CS240 (Data Structures)

Spring 2005

PUBLICATIONS

CONFERENCES

1. ERWAY, C., KÜPÇÜ, A., PAPAMANTHOU, C., AND TAMASSIA, R. Dynamic Provable Data Possession, in submission.
2. PAPAMANTHOU, C., TAMASSIA, R., AND TRIANDOPOULOS, N. Authenticated Hash Tables. In *Proc. of the Int. ACM Conference on Computer and Communications Security (CCS)* (Alexandria VA, U.S.A., 2008), pp. 1–1.
3. HEITZMANN, A., PALAZZI, B., PAPAMANTHOU, C., AND TAMASSIA, R. Efficient Integrity Checking of Untrusted Network Storage. In *Proc. of the ACM CCS Int. Workshop on Storage Security and Survivability (STORAGESS)* (Alexandria VA, U.S.A., 2008), pp. 1–1.
4. HEITZMANN, A., PALAZZI, B., PAPAMANTHOU, C., AND TAMASSIA, R. Effective Visualization of File System Access-Control. In *Proc. of the Int. Workshop on Security Visualization (VIZSEC)* (Boston MA, U.S.A., 2008), pp. 18–25.
5. GOODRICH, M. T., PAPAMANTHOU, C., TAMASSIA, R., AND TRIANDOPOULOS, N. Athos: Efficient Authentication of Outsourced File Systems. In *Proc. of the Int. Information Security Conference (ISC)* (Taipei, Taiwan, 2008), pp. 80–96.
6. PAPAMANTHOU, C., PREPARATA, F., AND TAMASSIA, R. Algorithms for Location Estimation Based on RSSI Sampling. In *Proc. of the ICALP Int. Workshop on Algorithms for Sensor Networks (ALGOSENSORS)* (Reykjavik, Iceland, 2008), pp. 1–1.
7. PAPAMANTHOU, C., AND TAMASSIA, R. Time and Space Efficient Algorithms for Two Party Authenticated Data Structures. In *Proc. of the Int. Conference on Information and Communication Security (ICICS)* (Zhengzhou, China, 2007), pp. 1–15.
8. GOODRICH, M. T., PAPAMANTHOU, C., AND TAMASSIA, R. On the Cost of Persistence and Authentication in Skip Lists. In *Proc. of the Int. Workshop on Experimental Algorithms (WEA)* (Rome, Italy, 2007), pp. 94–107.
9. PAPAMANTHOU, C., AND TOLLIS, I. G. Parameterized *st*-Orientations of Graphs: Algorithms and Experiments. In *Proc. of the Int. Conference on Graph Drawing (GD)* (Karlsruhe, Germany, 2006), pp. 220–233.
10. PAPAMANTHOU, C., AND TOLLIS, I. G. Applications of Parameterized *st*-Orientations in Graph Drawing Algorithms. In *Proc. of the Int. Conference on Graph Drawing (GD)* (Limerick, Ireland, 2005), pp. 355–367.
11. PAPAMANTHOU, C., TOLLIS, I. G., AND DOERR, M. 3D Visualization of Semantic Metadata Models and Ontologies. In *Proc. of the Int. Conference on Graph Drawing (GD)* (New York City NY, U.S.A., 2004), pp. 377–388.
12. PAPAMANTHOU, C., AND PAPARRIZOS, K. A Visualization of the Primal Simplex Algorithm for the Assignment Problem. In *Proc. of the Int. ACM Conference on Innovation and Technology in Computer Science Education (ITICSE)* (Thessaloniki, Greece, 2003), p. 267.

JOURNALS

13. MATHIEU, C., PAPAMANTHOU, C., Distortion Lower Bounds for Line Embeddings, *Information Processing Letters* 108, 4 (2008), 175–178.
14. PAPAMANTHOU, C., AND TOLLIS, I.G. Algorithms for Computing a Parameterized *st*-Orientation. *Theoretical Computer Science*, to appear.

15. PAPAMANTHOU, C., PAPARRIZOS, K., SAMARAS, N., AND STERGIU, N. Worst Case Examples of an Exterior Point Algorithm for the Assignment Problem. *Discrete Optimization* 5, 3 (2008), 605–614.
16. PAPAMANTHOU, C., PAPARRIZOS, K., AND SAMARAS, N. A Parametric Visualization Software for the Assignment Problem. *Yugoslav Journal of Operations Research* 15, 1 (2005), 147–158.
17. PAPAMANTHOU, C., PAPARRIZOS, K., AND SAMARAS, N. Computational Experience with Exterior Point Algorithms for the Transportation Problem. *Journal of Applied Mathematics and Computation* 158 (2004), 459–475.

OTHER

18. PAPAMANTHOU, C. Computing Longest Path Parameterized *st*-Orientations of Graphs: Algorithms and Applications. *Master of Science Thesis, University of Crete, Heraklion, Greece, 2005.*
19. PAPAMANTHOU, C. Effective Programming, Computational Study and Internet Visualization of Network Programming Problems Algorithms (in Greek). *Bachelor of Science Thesis, University of Macedonia, Thessaloniki, Greece, 2003.*

AWARDS

1. CCS 2008 travel grant by IBM Research and US Army Office.
2. Kanellakis Fellowship awarded by Brown University: Spring 2008, Fall 2008.
3. Fellowship (awarded by the University of Macedonia) to work on a European Union funded project (PITHAGORAS I) on *Computational Improvements in Combinatorial Optimization Algorithms*, 2004-2008.
4. Fellowship (awarded by the University of North Texas) to attend the *Workshop on Algorithms, Combinatorics and Geometry* in Denton, Texas, November 2007.

PROFESSIONAL ACTIVITIES

1. **Conference Reviewing:** (1) *International Conference on Graph Drawing (GD '07)*, (2) *Workshop on Algorithms and Data Structures (WADS '07)*, (3) *Conference on Theory and Practice in Computer Science (SOFSEM '05)*, (4) *Panhellenic Conference in Informatics (PCI '05)*
2. **Journal Reviewing:** (1) *IEEE Transactions on Computing*, (2) *SIAM Journal on Discrete Mathematics*, (3) *ACM Transactions on Data and Knowledge Engineering*
3. **Service to the Community:** (1) *Francofest: A late festschrift for Franco P. Preparata, November 2006* (member of the organizing committee), (2) *FOCS: 48th conference on Foundations of Computer Science, October 2007* (member of the organizing committee)

PATENTS

1. GOODRICH, M. T., PAPAMANTHOU, C., TAMASSIA, R., AND TRIANDOPOULOS, N. Apparatus, methods, and computer program products providing improved authentication for operations over an outsourced file system stored by an untrusted unit. *PCT and provisional U.S. patent application, US60/861,794*, November 2006.

IMMIGRATION STATUS

Resident of U.S.A., Greek citizen (F-1 VISA)