

CURRICULUM VITAE

JEFF ABRAHAMSON

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1 EDUCATIONAL BACKGROUND

Drexel University	PhD in Computer Science	(2007)
Drexel University	M.S. in Computer Science	2005
University of Pennsylvania	M.A. in Theoretical Mathematics	1990
Massachusetts Institute of Technology	S.B. in Theoretical Mathematics	1988

2 EMPLOYMENT

4/05–present	Graduate Research Fellow	Drexel University
1/03–3/05	Graduate Research Assistant	Drexel University
4/03–6/04	Teaching Assistant	Drexel University
10/92–5/02	Senior Software Engineer	Industry, references available on request
9/88–12/90	Teaching Assistant	University of Pennsylvania
10/83–6/88	Research Assistant	Massachusetts Institute of Technology

3 Publications

3.1 Refereed Journal Publications

- On Optimal Weighted Matchings, in preparation.
- Deterministic Random Sampling, in preparation.
- J. Abrahamson, A. Shokoufandeh, Euclidean TSP on Two Polygons, under review.
- J. Abrahamson, A. Shokoufandeh, P. Winter, Euclidean TSP Between Two Nested Convex Obstacles, Information Processing Letters, 95, 370–375 (2005).
- J. Abrahamson, Curves Length Minimizing Modulo ν , Michigan Mathematics Journal, v.35(2), 285–290 (1988).

- E.S. Lander, P. Green, J. Abrahamson, A. Barlow, M. Daly, S. Lincoln, L. Newburg, MAPMAKER: An Interactive Computer Package for Constructing Primary Genetic Linkage Maps of Experimental and Natural Populations, *Genomics*, October 1987.
- D. Donnis-Keller, P. Green, C. Helms, S. Cartinhour, B. Weiffenbach, K. Stephens, T. Keith, D. Bowden, D. Smith, E. Lander, D. Botstein, G. Akots, K. Rediker, T. Gravius, V. Brown, M. Rising, C. Parker, J. Powers, D. Watt, E. Kauffman, A. Bricker, P. Phipps, H. Muller-Kahle, T. Fulton, S. Ng, J. Schumm, J. Braman, R. Knowlton, D. Barker, S. Crooks, S. Lincoln, M. Daly, J. Abrahamson, A Genetic Linkage Map of the Human Genome, *Cell*, 51(2), 319–337, October 23, 1987.

3.2 Refereed Conference Publications

- Adam J. O'Donnell, Walt Mankowski, Jeff Abrahamson, Using E-Mail Social Network Analysis for Detecting Unauthorized Accounts, Third Conference on Email and Anti-Spam (CEAS 2006), Mountain View, California, 27–28 July 2006.
- Nicu D. Cornea, Ulukbek Ibraev, Deborah Silver, Paul Kantor, Ali Shokoufandeh, Jeff Abrahamson, Sven Dickinson, A Visualization Tool for fMRI Data Mining, *IEEE Visualization* 2005, 93.
- J. Abrahamson, A. Shokoufandeh, Lazy Robots Constrained by at Most Two Polygons, *IEEE/RJS International Conference on Intelligent Robots and Systems (IROS 2005)*, Edmonton, Alberta, August 2–6, 2005.
- T. Denton, M. F. Demirci, J. Abrahamson, A. Shokoufandeh, S. Dickinson, Approximation of Bounded Canonical Sets for 2D View Simplification, *International Conference on Pattern Recognition (ICPR 2004)*, Cambridge, England, pp. 273–276, August 23–26, 2004.
- T. Denton, J. Abrahamson, A. Shokoufandeh, Approximation of Canonical Sets and their Applications to 2D View Simplification, *IEEE Computer Society International Conference on Computer Vision and Pattern Recognition (CVPR 2004)*, Washington, DC, II-550–II-557, June 2004.
- J. Abrahamson, A. J. O'Donnell, Cryptar: Secure, Untrustful, Differencing Backup, NordU, Copenhagen, Denmark, January 2004.

3.3 Theses

- J. Abrahamson, Between a Rock and a Hard Place: Euclidean TSP in the Presence of Polygonal Obstacles, Masters Thesis, Drexel University, May 2005.

3.4 Technical Reports

- J. Abrahamson, ETSP on a Polygon in the Presence of a Polygonal Obstacle, DU-CS-04-09, September 2004.

4 Community Service

4.1 Reviewing Activities

- Journal reviews:

IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)
Journal of Information Systems
Image and Vision Computing
Pattern Recognition

- Conference reviews:
Computer Vision and Pattern Recognition (CVPR)
3-D Digital Imaging and Modeling (3DIM)
Deep Structure, Singularities and Computer Vision (DSSCV)

4.2 Committee Work

- Drexel University CS Graduate Student Council, president, 2004–2005.
- Drexel University CS Graduate Student Council, talk series coordinator, 2005–2006.

4.3 Mentoring

- Drexel University, Mentorship Program, responsible for supervising research of entering Drexel undergraduate, Summer 2003.
- Drexel University, supervised undergraduate researcher, John Novatnick, 2004–2005.
- Drexel University, supervised undergraduate researcher, Craig Schroeder, 2005.

4.4 Teaching

- Lecturer, Data Structures and Algorithms (undergraduate)
- Guest Lecturer, Data Structures and Algorithms (graduate level)
- Guest Lecturer, Computational Geometry (graduate level)
- Guest Lecturer, Object Recognition (graduate level)
- Recitation instructor, Calculus I – Calculus IV (undergraduate level)

5 Honors

- George Hill Fellowship, 2005.
- Drexel Chapter of Upsilon Pi Epsilon, 2004.
- National Science Foundation Graduate Fellowship Honorable Mention, 1989.

6 References

Ali Shokoufandeh	Associate Professor	Drexel University
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