References for survey talk "On line Search in Theoretical Computer Science" by Avrim Blum

1. Searching for a hole in a fence: [BCR93, KRT96].
2. Searching a known graph: [LLRS85, ACP+86, BCC+94, GK96].
3. Searching on a limited budget: [GW92, GK96, BRV96, Gar96]. See also
   `http://theory.lcs.mit.edu/~goemans/matching.html`
4. Reaching a target in a room with unknown rectangular obstacles: [BRS97, BBFY94].
5. Fast approximate breadth-first search: [ABRS95].
6. Learning an unknown deterministic Finite-State environment: [Ang87, RS93].

References

[ABRS95] Baruch Awerbuch, Margrit Betke, Ronald L. Rivest, and Mona Singh. Piecemeal graph exploration by a mobile robot. In *Proceedings of the 8th Annual Conference on Computational Learning Theory*, pages 321–328. ACM Press, New York, NY, 1995.

[ACP+86] F. Afrati, S. Cosmadakis, C. Papadimitriou, G. Papageorgiou, and N. Papakostantinou. The complexity of the traveling repairman problem. *Informatique Theorique et Applications (Theoretical Informatics and Applications)*, 20(1):79–87, 1986.

[Ang87] D. Angluin. Learning regular sets from queries and counterexamples. *Information and Computation*, 75(2):87–106, November 1987.

[BCR93] R. Baeza-Yates, J. Culberson, and G. Rawlins. Searching in the plane. *Information and Computation*, 106(2):234–252, 1993. Preliminary version in Proc. 1st Scandinavian Workshop on Algorithm Theory, Lecture Notes in Computer Science 318, Springer-Verlag, Berlin, 1988, 176–189. Also Tech. Report CS-87-68, University of Waterloo, Department of Computer Science, October, 1987.

[BBFY94] Elda Bar-Eli, Piotr Berman, Amos Fiat, and Peiyuan Yan. Online navigation in a room. *Journal of Algorithms*, 17:319–341, 1994.

[BCC+94] A. Blum, P. Chalasani, D. Coppersmith, B. Pulleyblank, P. Raghavan, and M. Sudan. The minimum latency problem. In *Proceedings of the 26th Annual ACM Symposium on Theory of Computing*, pages 163–171, 1994.

[BRS97] A. Blum, P. Raghavan, and B. Schieber. Navigating in unfamiliar geometric terrain. *SIAM J. Computing*, 26(1):110–137, 1997. An earlier version appears in Proceedings of the 23rd Annual ACM Symposium on Theory of Computing, pages 494-504, May 1991.

[BRV96] A. Blum, R. Ravi, and S. Vempala. A constant-factor approximation algorithm for the k-MST problem. In *Proceedings of the 28th Annual ACM Symposium on Theory of Computing*, pages 442–448, May 1996.

[Gar96] N. Garg. A 3-approximation for the minimum tree spanning k vertices. In *Proceedings of the 37th Annual Symposium on Foundations of Computer Science*, pages 302–309, October 1996.

[GK96] M. Goemans and J. Kleinberg. An improved approximation ratio for the minimum latency problem. In *Proceedings of the 7th Annual ACM-SIAM Symposium on Discrete Algorithms*, 1996. to appear.

[GW92] M. Goemans and D. Williamson. A general approximation technique for constrained forest problems. In *Proceedings of the 3rd Annual ACM-SIAM Symposium on Discrete Algorithms*, pages 307–315, 1992.

[KRT96] Ming-Yang Kao, John H. Reif, and Stephen R. Tate. Searching in an unknown environment: An optimal randomized algorithm for the cow-path problem. *Information and Computation*, 131(1):63–79, 25 November 1996.

[LLRS85] Eugene L. Lawler, J. K. Lenstra, A. H. G. Rinnooy Kan, and D. B. Shmoys, editors. *The Traveling Salesman Problem.* John Wiley & Sons, 1985.

[RS93] R. L. Rivest and R. E. Schapire. Inference of finite automata using homing sequences. *Information and Computation*, 103(2):299–347, April 1993.