DAVID R. KARGER

Work Address

MIT Computer Science and Artificial Intelligence Laboratory

32 Vassar St.

Cambridge, MA 02139

(617)-258-6167

Home Address

21 Craigie St.

Cambridge, MA 02138

(617)-491-9592

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Interests

Information management: personal information management, human computer interaction, databases, machine learning, social computing, semantic web

Data Structures and Algorithms; Graph Algorithms; Approximation Algorithms; Probabilistic Analysis. Applications in communication, networking, biology, natural language processing.

Experience

MASS. INSTITUTE OF TECHNOLOGY

Cambridge, MA

January 1995–present

Professor.

AKAMAI TECHNOLOGIES

Cambridge, MA

October 1998–April 2001

Research Scientist.

AT&T BELL LABORATORIES

Murray Hill, NJ

September 1994–January 1995

Postdoctoral Fellow.

XEROX PALO ALTO RESEARCH CENTER

Palo Alto, CA

1991-1995

Consultant in Information Retrieval.

STANFORD UNIVERSITY

Stanford, CA

1991 - 1994

Teaching assistant in theory of computation, data structures and algorithms, and graduate theory courses. Lectured, prepared assignments and exams, led sections.

Education

STANFORD UNIVERSITY

Stanford, CA

1991-1995

Ph.D. in Computer Science. Advisor: Professor Rajeev Motwani

CAMBRIDGE UNIVERSITY

Cambridge, England

1990

Certificate of Advanced Study in Mathematics.

HARVARD UNIVERSITY

Cambridge, MA

1985 - 89

B.A. summa cum laude in Computer Science and Physics.

Dissertation

Randomized Algorithms for Graph Optimization Problems. Presents new algorithms for several graph problems. Gives presently best sequential and parallel algorithm for finding minimum cuts in undirected graphs. Presents random sampling approaches to speeding up graph problems such as minimum spanning tree and maximum flow. Gives approximation algorithms for network design problems.

Honors

NAS award for Initiatives in Research, 2003

David and Lucille Packard Foundation Fellowship, 1997–2002

Alfred P. Sloane Foundation Fellowship, 1997–1999

Mathematical Programming Society Tucker Prize, 1997

National Science Foundation CAREER award, 1996-1999

ACM Doctoral Dissertation Award, 1994

Hertz Foundation Graduate Fellowship, 1993-94

National Science Foundation Graduate Fellowship, 1990-93

Churchill Foundation Fellowship for study at Cambridge University, 1989-90

Phi Beta Kappa, 1989

Professional Activities

Referee for Journal of the ACM, ACM Transactions on Information Systems, Mathematical Programming, Journal of Algorithms, SIAM Journal on Computing, Information Processing Letters, Journal of Computer and System Sciences,

Program Committees: 1996 ACM-SIAM Symposium on Discrete Algorithms, 1996 and 1998 IEEE Symposium on Foundations of Computer Science, 2002 International Peer to Peer Systems conference (IPTPS), 2005 ACM Symposium on Theory of Computing, 2007 and 2009 Conference on Innovative Database Systems Research (CIDR), 2008 International Semantic Web Conference (ISWC), 2010 Conference on Intelligent User Interfaces (IUI), 2008 and 2010 Conference on Information Retrieval (SIGIR), 2009 Visual Interface to the Social and Semantic Web, Conference on Human-Computer Interaction (CHI) 2010, World Wide Web conference (WWW) 2003, 2009, 2010

Chair: 2009 International Semantic Web Conference (ISWC) 2009

Member SIAM, ACM, AMS

ACM Fellow