DAVID R. KARGER

Work Address

MIT Computer Science and Artificial Intelligence Laboratory

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Cambridge, MA 02139

(617)-258-6167

Home Address

21 Craigie St.

Cambridge, MA 02138

(617)-491-9592

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Interests

The web: online discussion tools, end user data management, simpler web stacks,

decentralization.

Information management: personal information management, human computer

interaction, databases, machine learning, social computing, semantic web

Graph Algorithms and Analysis. Applications in communication, coding, network-

ing, machine learning, 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

Member, American Academy of Arts and Sciences, 2019

ACM SIGOPS Hall of Fame Award, 2015

ACM SIGIR Test of Time Award, 2014

ACM SIGCOMM Test of Time Award, 2011

IEEE Communications and Information Societies' Joint Paper Award, 2009

ACM Fellow, 2009

IEEE William Bennet Paper Prize, 2004

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

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: ACM-SIAM Symposium on Discrete Algorithms, 1996; IEEE Symposium on Foundations of Computer Science, 1996 and 1998; International Peer to Peer Systems conference (IPTPS), 2002; ACM Symposium on Theory of Computing, 2005; Conference on Innovative Database Systems Research (CIDR), 2007 and 2009; ACM conference on Principles of Database Systems (PODS): 2013, 2014; International Semantic Web Conference (ISWC), 2008–2014; Conference on Intelligent User Interfaces (IUI), 2010; ACM Conference on Information Retrieval (SIGIR), 2008 and 2010; Visual Interface to the Social and Semantic Web, 2009; Conference on Human-Computer Interaction (CHI) 2010 and 2011; ACM User Interface Systems and Technology (UIST) Conference, 2015 and 2016; ACM Conference on Computer Supported Cooperative Work (CSCW): 2017, 2018, 2019. World Wide Web conference (WWW) 2003, 2009, 2010

Chair: 2009 International Semantic Web Conference (ISWC) 2009

Member SIAM, ACM