Jeffrey Ullman
Stanford Warren Ascherman Professor of Engineering, Emeritus
Computer Science

Bio

BIO

Jeff Ullman is the Stanford W. Ascherman Professor of Engineering (Emeritus) in the Department of Computer Science at Stanford and CEO of Gradiance Corp. He received the B.S. degree from Columbia University in 1963 and the PhD from Princeton in 1966. Prior to his appointment at Stanford in 1979, he was a member of the technical staff of Bell Laboratories from 1966-1969, and on the faculty of Princeton University between 1969 and 1979. From 1990-1994, he was chair of the Stanford Computer Science Department. Ullman was elected to the National Academy of Engineering in 1989, the American Academy of Arts and Sciences in 2012, and has held Guggenheim and Einstein Fellowships. He has received the Sigmod Contributions Award (1996), the ACM Karl V. Karlstrom Outstanding Educator Award (1998), the Knuth Prize (2000), the Sigmod E. F. Codd Innovations award (2006), the IEEE von Neumann medal (2010), and the NEC C&C Foundation Prize (2017). He is the author of 16 books, including books on database systems, compilers, automata theory, and algorithms.

ACADEMIC APPOINTMENTS

• Emeritus Faculty, Acad Council, Computer Science

Teaching

COURSES

2021-22

• Program Analysis and Optimizations: CS 243 (Spr)

2020-21

• Bridging Policy and Tech Through Design: CS 184, PUBLPOL 170 (Spr)

2019-20
• Bridging Policy and Tech Through Design: CS 184 (Spr)
2018-19
• Project in Mining Massive Data Sets: CS 341 (Spr)

Publications

PUBLICATIONS

• Scaling Cryptographic Techniques by Exploiting Data Sensitivity at a Public Cloud
  Mehrotra, S., Sharma, S., Ullman, J. D., ACM
  ASSOC COMPUTING MACHINERY.2019: 165–67

• Partitioned Data Security on Outsourced Sensitive and Non-sensitive Data
  Mehrotra, S., Sharma, S., Ullman, J. D., Mishra, A., IEEE
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• SharesSkew: An algorithm to handle skew for joins in MapReduce INFORMATION SYSTEMS
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• Efficient and Private Approximations of Distributed Databases Calculations
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• Assignment Problems of Different-Sized Inputs in MapReduce ACM TRANSACTIONS ON KNOWLEDGE DISCOVERY FROM DATA
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• Experiments as Research Validation: Have We Gone Too Far? COMMUNICATIONS OF THE ACM
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  SPRINGER-VERLAG BERLIN.2014: 536–537

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• Optimizing Multiway Joins in a Map-Reduce Environment IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING
  Afrati, F. N., Ullman, J. D.
  2011; 23 (9): 1282-1298
• Cluster Computing, Recursion and Datalog 1st International Workshop on Datalog Reloaded (Datalog)
  Afrati, F. N., Borkar, V., Carey, M., Polyzotis, N., Ullman, J. D.
  SPRINGER.2011: 120–144

• Using views to generate efficient evaluation plans for queries JOURNAL OF COMPUTER AND SYSTEM SCIENCES
  Afrati, F. N., Li, C., Ullman, J. D.
  2007; 73 (5): 703-724

• The Lowell database - Research self assessment COMMUNICATIONS OF THE ACM
  2005; 48 (5): 111-118

• Querying websites using compact skeletons 20th Symposium on Principles of Database Systems
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• Generating efficient plans for queries using views ACM SIGMOD International Conference on Management of Data
  Afrati, F. N., Li, C., ULLMAN, J. D.
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• Minimizing view sets without losing query-answering power 8th International Conference on Database Theory (ICDT 2001)
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• Finding interesting associations without support pruning 16th International Conference on Data Engineering (ICDE 2000)
  Cohen, E., Datar, M., Fujiwara, S., Gionis, A., Indyk, P., Motwani, R., ULLMAN, J. D., Yang, C.
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• Scalable techniques for mining causal structures DATA MINING AND KNOWLEDGE DISCOVERY
  Silverstein, C., Brin, S., Motwani, R., Ullman, J.

• Information integration using logical views 6th International Conference on Database Theory (ICDT 97)
  ULLMAN, J. D.
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• Answering queries using limited external query processors 15th ACM SIGACT-SIGMOD-SIGART Symposium on Principles of Database Systems
  Levy, A. Y., Rajaraman, A., Ullman, J. D.
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• Optimizing large join queries in mediation systems 7th International Conference on Database Theory (ICDT 99)
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  ULLMAN, J. D.
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• Index selection for OLAP 13th International Conference on Data Engineering
  Gupta, H., Harinarayan, V., Rajaraman, A., ULLMAN, J. D.
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• A SURVEY OF DEDUCTIVE DATABASE-SYSTEMS JOURNAL OF LOGIC PROGRAMMING  
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