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 C&CFoundation 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
2019-20
- Project in Mining Massive Data Sets: CS 341 (Spr)

2018-19
- Project in Mining Massive Data Sets: CS 341 (Spr)

2016-17
• Mining Massive Data Sets: CS 246 (Win)
• Project in Mining Massive Data Sets: CS 341 (Spr)

STANFORD ADVISEES

Master's Program Advisor
Yiqi Chen, Ankit Mathur, Ruben Mayer-Hirshfeld, Jason Sullivan, Jingjing Tian, Qiwen Wang, Yanbang Wang, Anton de Leon

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
  IEEE.2019: 650–61

• SharesSkew: An algorithm to handle skew for joins in MapReduce INFORMATION SYSTEMS
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• Computing marginals using MapReduce JOURNAL OF COMPUTER AND SYSTEM SCIENCES
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  Afrati, F. N., Hidders, J., Koutris, P., Sroka, J., Ullman, J.
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• Assignment Problems of Different-Sized Inputs in MapReduce ACM TRANSACTIONS ON KNOWLEDGE DISCOVERY FROM DATA
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  Afrati, F. N., Koutris, P.,Suciu, D., Ullman, J. D.
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• Brief Announcement: Assignment of Different-Sized Inputs in MapReduce 28th International Symposium on Distributed Computing
  Afrati, F., Dolev, S., Korach, E., Sharma, S., Ullman, J. D.
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• Fuzzy Joins Using MapReduce 28th IEEE International Conference on Data Engineering (ICDE)
  Afrati, F. N., Das Sarma, A., Menestrina, D., Parameswaran, A., Ullman, J. D.
  IEEE.2012: 498–509
• 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

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Silverstein, C., Brin, S., Motwani, R., Ullman, J.

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Levy, A. Y., Rajaraman, A., Ullman, J. D.
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• **Representative objects: Concise representations of semistructured, hierarchical data**  *13th International Conference on Data Engineering*
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• **The database approach to knowledge representation**  *13th National Conference on Artificial Intelligence (AAAI 96) / 8th Conference on Innovative Applications of Artificial Intelligence (IAAI 96)*
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• EFFICIENT TESTS FOR TOP-DOWN TERMINATION OF LOGICAL RULES JOURNAL OF THE ACM
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Karlin, A. R., TRICKEY, H. W., ULLMAN, J. D.
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• **A SIMPLIFIED UNIVERSAL RELATION ASSUMPTION AND ITS PROPERTIES** *ACM TRANSACTIONS ON DATABASE SYSTEMS*
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• **DEADLOCK-FREE PACKET SWITCHING-NETWORKS** *SIAM JOURNAL ON COMPUTING*
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• **CODE GENERATION FOR EXPRESSIONS WITH COMMON SUB-EXPRESSIONS** *JOURNAL OF THE ACM*
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• **TRANSLATIONS ON A CONTEXT FREE GRAMMAR** *INFORMATION AND CONTROL*
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