

Biographical Sketch - Christopher Jermaine

Dr. Christopher Jermaine's research interests span the areas of data management and databases, data mining, and statistics. He is particularly interested in problems related to applying rigorous statistical analysis and algorithms to very large-scale data sets.

Professional Preparation

Institution	Major	Degree
University of California, San Diego	Mathematics/Computer Science	B.A., 1993
The Ohio State University	Computer and Information Science	M.Sc., 1997
The University of Arizona	Computer Science	Ph.D. student (no degree)
Georgia Institute of Technology	Computer Science	Ph.D., 2002

Appointments

Institution	Position	Dates
Rice University	Professor	Sum., 2016-present
Rice University	Associate Professor	Spring, 2009- Sum., 2016
University of Florida	Associate Professor	Fall, 2008
University of Florida	Assistant Professor	Fall, 2002 - Summer, 2008
Georgia Institute of Technology	Instructor	1999- Spring, 2002

Selected Products

Related to Proposed Research

- [1] Vijjay Murali, Swarat Chaudhuri, Chris Jermaine: Bayesian Specification Learning for Finding API Usage Errors. ESEC/SIGSOFT FSE 2017:151-162.
- [2] Binhang Yuan, Vijay Murali, Chris Jermaine: Abridging Source Code. To appear: 2017 ACM SIGPLAN OOPSLA Conference.
- [3] Jacob Gao, Shangyu Luo, Luis Leopoldo Perez, Chris Jermaine: The BUDS Language for Distributed Bayesian Machine Learning. SIGMOD Conference, 2017: 961-976.
- [4] Cai Zhuhua, Luis Perez, Chris Jermaine, Foula Vagena, Jacob Gao, Shangyu Luo: An Experimental Comparison of Platforms for Implementing and Executing Large-Scale Machine Learning Algorithms. SIGMOD Conference, 2014:1371-1382
- [5] Cai Zhuhua, Foula Vagena, Subi Arumugam, Luis Perez, Chris Jermaine, Peter Haas: Simulation of Database-Valued Markov Chains with SimSQL. SIGMOD Conference 2013: 637-648

General Products

- [6] Shangyu Luo, Jacob Gao, Michael Gubanov, Luis Leopoldo Perez, Chris Jermaine: Scalable Linear Algebra on a Relational Database System. ICDE Conference, 2017: 523-534. Best paper award winner.
- [7] Floran Rusu, Zixuan Zhuang, Mingxi Wu, Chris Jermaine: Workload-Driven Antijoin Cardinality Estimation. ACM Trans. Database Syst.40 (3): 1-41 (2015)
- [8] Yanxin Lu, Joe Warren, Christopher Jermaine, Swarat Chaudhuri, Scott Rixner: Grading the Graders: Motivating Peer Graders in a MOOC. WWW Conference, 2015: 680-690
- [9] Luis Perez, Chris Jermaine: History-Driven Query Optimization with Materialized Intermediate Views. ICDE Conference, 2014: 520-531
- [10] Supriya Nirkhiwale, Alin Dobra, Chris Jermaine: A Sampling Algebra for Aggregate Estimation. PVLDB 6(14): 1798-1809 (2013)

Synergistic Activities

- (1) Served as PC chair for ICDE 2013, one of the “big three” database conferences.
- (2) Served as a PC member for ACM SIGMOD, ACM KDD, VLDB, IEEE ICDE, SIAM Data Mining, etc.
- (3) Associate editor of the Very Large Database Journal, IEEE TKDE, and ACM TODS.
- (4) Serving as general chair of SIGMOD 2018. SIGMOD is the flagship conference sponsored by the ACM Special Interest Group for the Management of Data, the premier professional organization for data management researchers.
- (5) Close collaboration with health scientists to transfer mining technology to applications in medical informatics.