

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	Associate Professor	Spring, 2009-
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] 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. To appear: SIGMOD Conference, 2014, 12 pages
- [2] Anna Drummond, Chris Jermaine, Zografoula Vagena: Topic Models For Feature Selection in Document Clustering. SDM Conference 2013: 521-529
- [3] 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
- [4] Ravi Jampani, Fei Xu, Mingxi Wu, Luis Leopoldo Perez, Chris Jermaine, Peter J. Haas: The monte carlo database system: Stochastic analysis close to the data. ACM Trans. Database Syst. 36(3): 18 (2011)
- [5] Subi Arumugam, Ravi Jampani, Luis Leopoldo Perez, Fei Xu, Christopher M. Jermaine, Peter J. Haas: MCDB-R: Risk Analysis in the Database. PVLDB 3(1): 782-793 (2010)

General Products

- [6] SLuis Perez, Chris Jermaine: History-Driven Query Optimization with Materialized Intermediate Views. To appear: ICDE Conference, 2014, 12 pages
- [7] upriya Nirkhivale, Alin Dobra, Chris Jermaine: A Sampling Algebra for Aggregate Estimation. PVLDB 6(14): 1798-1809 (2013)
- [8] Niketan Pansare, Vinayak Borkar, Chris Jermaine, Tyson Condie: Online Aggregation Over Large MapReduce Jobs. PVLDB 2011: 659-670
- [9] Subi Arumugam, Alin Dobra, Christopher M. Jermaine, Niketan Pansare, Luis Leopoldo Perez: The DataPath system: a data-centric analytic processing engine for large data warehouses. SIGMOD Conference 2010: 519-530
- [10] Luis Leopoldo Perez, Subi Arumugam, Christopher M. Jermaine: Evaluation of probabilistic threshold queries in MCDB. SIGMOD Conference 2010: 687-698

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) Co-organizer for the National Academy of Sciences Kavli Symposium, a science-wide once-yearly symposium sponsored by the NAS, with a goal of fostering collaboration and communication by scientists across disciplines
- (5) Close collaboration with health scientists to transfer mining technology to applications in medical informatics

Recent Collaborators and Other Affiliations

Gagan Agrawal, Ohio State
Elmer Bernstam, University of Texas Health Sciences
Vinayak Borkar, University of California, Irvine
Tyson Condie, UCLA/Microsoft
Alin Dobra, University of Florida
Minos Garofalakis, Technical University of Crete
Peter J. Haas, IBM Almaden Research Center
Jorge Herskovic, MD Anderson Cancer Center
John Frenzel, MD Anderson Cancer Center
Supriya Nirkhiwale, University of Florida
Tamer Kahveci, University of Florida
Nitendra Rajput, IBM Research India
Sanjay Ranka, University of Florida
Joseph Ruiz, MD Anderson Cancer Center
Florin Rusu, University of California, Merced
Wai Gen Yee, Illinois Institute of Technology
Mingxi Wu, Turn, Inc.

Advisors:

Edward Omiecinski, Georgia Institute of Technology (Ph.D. thesis advisor)
Richard Snodgrass, University of Arizona (Ph.D. advisor while a student at U. of Arizona)
Renee J. Miller, University of Toronto (M.Sc. advisor at the Ohio State University)

Thesis advisor and postgraduate-scholar sponsor (2 postocs:19 graduate students)

Postdocs: Manas Somaiya, EBay; Zografoula Vegena, LogicBlox

PhD students: Subramanian Arumugam, Greenplum; Arkabandhu Chowdhury, Rice (current); Anna Drummond, Ruths Analytics and Innovation; Jacob Gao, Rice (current); Ravi Jampani, Vertica; Shantanu Joshi, Oracle; Shangyu Luo, Rice (Current); Risa Myers, Rice (current); Rohan Mukherjee, Rice (current); Niketan Pansare, IBM Almaden; Letao Qi, Rice (current); Luis Leopoldo Perez, Rice (current); Abhijit Pol, Yahoo!; Manas Somaiya, EBay; Xiuyao Song, Yahoo!; Fei Xu, Microsoft; Jayendra Venkateswaran, University of Florida; Mingxi Wu, Oracle; Cai Zhuhua, Google.