Jehan-François Pâris

Department of Computer Science
University of Houston
Houston, TX 77204-3010

Phone: 713-743-3341
E-mail: jfparis@uh.edu
hhtp://www.cs.uh.edu/~paris

PROFESSIONAL EXPERIENCE

2003–Pres. Professor, Dept. of Computer Science, University of Houston.

1997–1998 Visiting Associate Professor, Dept. of Computer Science, University of California, Santa Cruz.

1988–2003 Associate Professor, Dept. of Computer Science, University of Houston.

1982–1988 Assistant Professor, Dept. of CSE, University of California, San Diego.

1979–1982 Assistant Professor, Dept. of Computer Science, Purdue University.

EDUCATION

1981 Ph. D. in EECS, University of California, Berkeley.

1975 License et Maîtrise en Informatique, Facultés Universitaires de Namur, Belgium.

1972 Diplôme d'Études Approfondies en Informatique, Université de Paris VI, France.

1970 Ingénieur Civil Chimiste, Université Libre de Bruxelles, Belgium.

RECENT PUBLICATIONS

1. J.-F. Pâris and T. Schwarz, SJ, Merkle Hash Grids instead of Merkle Trees, *Proc. 28th International Symp. on Modeling, Analysis and Simulation of Computer and Telecommunication Systems* (MASCOTS 2020), Nice, France, Nov. 2020, *to appear*.

2. J.-F. Pâris, Bundling Together RAID Disk Arrays for Greater Protection and Easier Repairs, *Proc. 27th International Symp. on Modeling, Analysis and Simulation of Computer and Telecommunication Systems* (MASCOTS 2019), Rennes, France.

3. V. Estrada-Galiñanes, E. Miller, P. Felber and J.-F. Pâris, Alpha Entanglement Codes: Practical Erasure Codes to Archive Big Data in Unreliable Environments, *Proc. 2018 IEEE/IFIP International Conf. on Dependable Systems and Networks*, Luxembourg, Luxembourg, June 2018.

4. J.-F. Pâris, V. Estrada-Galiñanes, A Amer, C. A. Rincón, Using Entanglements to Increase the Reliability of Two-Dimensional Square RAID Arrays, *Proc. 36th International Performance of Computers and Communication Conf.* (IPCCC 2017), San Diego, CA, Dec. 2017.

5. C. A. Rincón, J.-F. Pâris, R. Vilalta, A. M. K. Cheng, and D. D. E. Long, Disk Failure Prediction in Heterogeneous Environments, *Proc. 2017 International Symp. on Performance Evaluation of Computer and Telecommunication Systems* (SPECTS 2017), Seattle, WA, July 2017.

6. V. Estrada-Galiñanes, J.-F. Pâris and P. Felber, Simple Data Entanglement Layouts with High Reliability, *Proc. 35th International Performance of Computers and Communication Conf.* (IPCCC 2016), Las Vegas, NV, Dec. 2016.

7. J.-F. Pâris, T. Schwarz, S. J. and D. D. E. Long, Improving Disk Array Reliability Through Faster Repairs, *Proc. 35th International Performance of Computers and Communication Conf.* (IPCCC 2016), Las Vegas, NV, Dec. 2016.

8. T. Schwarz, S. J., A. Amer, T. Kroeger, E. L. Miller, D. D. E. Long and J.-F. Pâris, Reliable Storage at Exabyte Scale, *Proc. 24th International Symp. on Modeling, Analysis and Simulation of Computer and Telecommunication Systems* (MASCOTS 2016), London, GB. (***Best paper award***)

9. J.-F. Pâris and D.D. E. Long, Pirogue, a lighter dynamic version of the Raft distributed consensus algorithm, *Proc. 34th International Performance of Computers and Communication Conf.* (IPCCC 2015), Nanjing, China, Dec. 2015. (***Best paper runner-up award*).**

10. T. Schwarz, S. J., D. D. E. Long and J.-F. Pâris, Triple failure tolerant storage systems using only exclusive-or parity calculations, *Proc. 21st IEEE Pacific Rim International Symp. on Dependable Computing* (PRDC 2015), Zhangjiajie, China, Nov. 2015.

11. T. Schwarz, S. J., A. Amer and J.-F. Pâris, Combining Low IO-Operations During Data Recovery with Low Parity Overhead in Two-Failure Tolerant Archival Storage, *Proc. 21st IEEE Pacific Rim International Symp. on Dependable Computing* (PRDC 2015), Zhangjiajie, China, Nov. 2015.

12. J.-F. Pâris and D. D. E. Long, Reducing the Energy Footprint of a Distributed Consensus Algorithm, *Proc. 11th European Dependable Computing Conf.* (EDCC 2015), Paris, France, Sep. 2015.

13. J.-F. Pâris, A. Amer, D.D. E. Long, T. Schwarz, S. J. Self-Repairing Disk Arrays, *Proc. 5th International Workshop on Adaptive Self-tuning Computing Systems*, Jan. 2015, Amsterdam, NL.

PH. D. STUDENTS GRADUATED

1. Raja Kushalnagar. *Optimizing Video Presentations for Deaf and Hard of Hearing Participants in Mainstream Classrooms*, UH, 2010.

2. Purvi Shah. *Scaling Content-Based Services Using P2P Technology*, UH, 2008.

3. Jinsuk Baek. *Scalable Approaches for Tree-Based Reliable Multicast,* UH, 2004.

4. José-Carlos Martínez-Vélez. *The Design of a CORBA Replication Service for Fault-Tolerant Distributed Object Systems,* UH, 2001.

5. Darrell D. E. Long. *The Management of Replication in a Distributed System*, UCSD, 1988.

6. J. F. Cigas. *The Design and Evaluation of a Block-Level Disk Cache Using Pseudofiles*, UCSD, 1988.

M. S. STUDENTS GRADUATED

1. Thu Nguyen. *Disk Failure Prediction in Heterogeneous Environments Using Neural Networks,* University of Houston, 2019.

2. Hsu-Wan Kao. *Proteus: A portable simulation program for estimating data loss risks in disk arrays*, UH, 2012.

3. Sara Chaarawi. *Using Storage Class Memories to Improve the Reliability of RAID Arrays*, UH, 2010.

4. Samir Sachdev. *A Realistic Evaluation of Data Survivability of Fault-Tolerant Disk Arrays*, UH, 2009.

5. Rong Tao, *The Variable Bit-Rate Fixed-Delay Broadcasting Protocol*, UH, 2008.

6. Jawad Ur Rasheed. *A Performance Evaluation of Peer to Peer Multimedia Streaming Systems*, UH, 2008.

7. Santosh Kulkarni. *Involving Clients in Distribution of Videos on Demand*, UH, 2006.

8. Reshma Khatri. *Using Artificial Neural Networks to Select the Best File Access Prediction Heuristic*, UH, 2006.

9. Natarajan Ravichandran. *Making Early Predictions of File Accesses*, UH, 2005.

10. Andrew Fritz. *The Maille Security Protocol Suite: A Novel Protocol Suite for Authentication and Authorization in Large Distributed System*, UH, 2004.

11. Wenjing Chen. *A Two-Expert Approach for File System Reference Prediction*, UH, 2004.

12. Lei Yu. *A Restrained Hierarchical Stream Merging Protocol for Video-on-Demand*, UH, 2003.
13. Chong Seng Yeo. *A Group-Based File Predictor,* UH, 2003.
14. Cyrus D. Vesuna. *An Empirical Study of Harmonic Broadcasting Protocols for Video-on-Demand*, UH, 2003.
15. Lyle D. Wincentsen. *An Assessment of the Practicality of VoIP Using Gateways*, UH, 2003.
16. Karthik Thirumalai. *Tabbycat: An Inexpensive Scalable Server for Video-on-Demand*, UH, 2003.
17. Jing-Yu Lee. *A Modified Hierarchical Stream Merging Protocol for Video-on-Demand,* UH, 2003.
18. Qiong Zhang. *A Channel-Based Heuristic Distribution Protocol for Video-on-Demand,* UH, 2002.
19. Gary A. S. Whittle. *A Hybrid Scheme for File System Reference Prediction*, UH, 2002.
20. Saurabh Mohan. *Characterizing the Bandwidth Requirements of Compressed Videos*, UH, 2001.
21. Pei-Fen You. *A Dynamic Fast-Pagoda Broadcasting Protocol for Video-on-Demand*, UH, 2000.
22. Hong Xue. *An Interactive Broadcasting Protocol for Video-on-Demand*, UH, 2000.
23. Qing Wang. *A Dynamic Proactive Broadcasting Protocol for Video-on-Demand*, UH, 1999.
24. Gaurav Bahadur. *Improving the Write Performance of Redundant Disk Arrays*, UH, 1997.
25. Leroy L. Mattingly, Jr. *DPCTools++: A Framework of C++ Classes for Distributed Parallel Computing*, UH, 1995.
26. Qun Rose Wang. *Managing Replicated Data in the Presence of Network Partitions*, UH, 1995.
27. Reza Hussein. *AGENT: Another Global accEss Network Transparent Distributed File System*, UH, 1994.
28. Chris M. Cavers. *Don't Turn Off That Machine: Caching Read-Only Files on Idle Workstations*, UH, 1993.
29. Jonathan F. Humphreys. *A Distributed Revision Control System*, UH, 1993.
30. Perry K. Sloope. *A Realistic Evaluation of the Effect of Network Partitioning on the Management of Replicated Data*, UH, 1991.
31. Ravi G. Kathuria. *Fast Practical Protocols for the Management of Replicated Data*, UH, 1991.
32. Ignacio Valdes. *Efficient Caching of Temporary Files*, UH, 1990.

RECENT PROFESSIONAL ACTIVITIES

- Program Committee, 27th and 28th International Symp. on Modeling, Analysis and Simulation of Computer and Telecommunication Systems (MASCOTS 2019-2020).
- Program Committee, 39th IEEE International Conf. on Distributed Computing Systems (ICDCS 2019).
- Program Committee, 7th ACM/SPEC International Conf. on Performance Engineering (ICPP 2016), Track #5, Storage and File Systems.

PROFESSIONAL SOCIETIES

- Senior member, Institute of Electrical and Electronics Engineers: Computer Society.
- Senior member, Association for Computing Machinery. Special Interest Groups on Operating Systems (SIGOPS), Measurement and Evaluation (SIGMETRICS), Management of Data (SIGMOD) and Multimedia (SIGMM).