

## 1 Verification and Checking

- Verdi: A Framework for Implementing and Formally Verifying Distributed Systems [11]
- Teaching Rigorous Distributed Systems with Efficient Model Checking [8]
- A Generalised Solution to Distributed Consensus [2]

## 2 Consensus

- SDPaxos: Building Efficient Semi-Decentralized Geo-replicated State Machines [12]
- Mencius: building efficient replicated state machines for WANs [7]
- Fast Paxos [5]
- Generalized Consensus and Paxos [4]
- MDCC: Multi-Data Center Consistency [3]
- On the correctness of Egalitarian Paxos [10]
- There Is More Consensus in Egalitarian Paxos [9]
- The FuzzyLog: A Partially Ordered Shared Log [6]

## 3 Databases and Implementations

- Spanner: Google’s Globally-Distributed Database [1]

## References

- [1] CORBETT, J. C., DEAN, J., EPSTEIN, M., FIKES, A., FROST, C., FURMAN, J., GHEMAWAT, S., GUBAREV, A., HEISER, C., HOCHSCHILD, P., HSIEH, W., KANTHAK, S., KOGAN, E., LI, H., LLOYD, A., MELNIK, S., MWaura, D., NAGLE, D., QUINLAN, S., RAO, R., ROLIG, L., SAITO, Y., SZYMANIAK, M., TAYLOR, C., WANG, R., AND WOODFORD, D. Spanner: Google’s globally-distributed database. In *10th USENIX Symposium on Operating Systems Design and Implementation (OSDI 12)* (Hollywood, CA, 2012), USENIX Association, pp. 261–264.
- [2] HOWARD, H., AND MORTIER, R. A generalised solution to distributed consensus. *CoRR abs/1902.06776* (2019).

- [3] KRASKA, T., PANG, G., FRANKLIN, M. J., MADDEN, S., AND FEKETE, A. Mdcc: Multi-data center consistency. In *Proceedings of the 8th ACM European Conference on Computer Systems* (New York, NY, USA, 2013), EuroSys '13, ACM, pp. 113–126.
- [4] LAMPORT, L. Generalized consensus and paxos. Tech. Rep. MSR-TR-2005-33, March 2005.
- [5] LAMPORT, L. Fast paxos. *Distributed Computing 19* (October 2006), 79–103.
- [6] LOCKERMAN, J., FALEIRO, J. M., KIM, J., SANKARAN, S., ABADI, D. J., ASPNES, J., SEN, S., AND BALAKRISHNAN, M. The fuzzylog: A partially ordered shared log. In *13th USENIX Symposium on Operating Systems Design and Implementation (OSDI 18)* (Carlsbad, CA, Oct. 2018), USENIX Association, pp. 357–372.
- [7] MAO, Y., JUNQUEIRA, F. P., AND MARZULLO, K. Mencius: Building efficient replicated state machines for wans. In *Proceedings of the 8th USENIX Conference on Operating Systems Design and Implementation* (Berkeley, CA, USA, 2008), OSDI'08, USENIX Association, pp. 369–384.
- [8] MICHAEL, E., WOOS, D., ANDERSON, T., ERNST, M. D., , AND TATLOCK, Z. Teaching rigorous distributed systems with efficient model checking. In *EuroSys* (Dresden, Germany, Mar. 2019).
- [9] MORARU, I., ANDERSEN, D. G., AND KAMINSKY, M. There is more consensus in egalitarian parliaments. In *Proceedings of the Twenty-Fourth ACM Symposium on Operating Systems Principles* (New York, NY, USA, 2013), SOSP '13, ACM, pp. 358–372.
- [10] SUTRA, P. On the correctness of egalitarian paxos. *CoRR abs/1906.10917* (2019).
- [11] WILCOX, J. R., WOOS, D., PANCHEKHA, P., TATLOCK, Z., WANG, X., ERNST, M. D., AND ANDERSON, T. Verdi: A framework for implementing and formally verifying distributed systems. In *Proceedings of the 36th ACM SIGPLAN Conference on Programming Language Design and Implementation* (New York, NY, USA, 2015), PLDI '15, ACM, pp. 357–368.
- [12] ZHAO, H., ZHANG, Q., YANG, Z., WU, M., AND DAI, Y. Sdpaxos: Building efficient semi-decentralized geo-replicated state machines. In *ACM Symposium on Cloud Computing 2018 (SoCC)* (October 2018), ACM.