

# Topics of Research

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1. 17th (and more) (non)-randomness tests  
[http://csrc.nist.gov/groups/ST/toolkit/rng/documentation\\_software.html](http://csrc.nist.gov/groups/ST/toolkit/rng/documentation_software.html)
2. RC4 state recovery  
<http://www.isical.ac.in/~rcbose/internship/lectures2016/rt05maximov.pdf>
3. RC4 key collision for keys shorter than 22 bytes  
<http://www.isical.ac.in/~rcbose/internship/lectures2016/rt05matsui.pdf>  
<http://www.isical.ac.in/~rcbose/internship/lectures2016/rt05chenm.pdf>
4. Provably secure efficient stream cipher design  
<https://www.iacr.org/archive/eurocrypt2006/40040110/40040110.pdf>
5. Classical/Quantum Boolean functions in property testing  
<http://cjtcs.cs.uchicago.edu/articles/2010/1/cj10-01.pdf>  
[http://homepages.cwi.nl/~rdewolf/publ/qc/proptest\\_tocfinal.pdf](http://homepages.cwi.nl/~rdewolf/publ/qc/proptest_tocfinal.pdf)
6. Long quantum bit commitment: design and analysis  
<http://arxiv.org/pdf/1507.00239v1.pdf>
7. Third party auditing of cloud data  
<https://eprint.iacr.org/2012/365.pdf>
8. (Non ?) Democratic mining in Bitcoins  
[http://link.springer.com/chapter/10.1007%2F978-3-319-13841-1\\_11](http://link.springer.com/chapter/10.1007%2F978-3-319-13841-1_11)  
[http://link.springer.com/chapter/10.1007%2F978-3-319-26961-0\\_10](http://link.springer.com/chapter/10.1007%2F978-3-319-26961-0_10)
9. Efficient GPU implementation of crypto algorithms  
<https://eprint.iacr.org/2013/059.pdf>  
[http://link.springer.com/chapter/10.1007%2F978-3-642-38553-7\\_11](http://link.springer.com/chapter/10.1007%2F978-3-642-38553-7_11)
10. Efficient hardware design of crypto algorithms  
[http://link.springer.com/chapter/10.1007%2F978-3-642-45204-8\\_13](http://link.springer.com/chapter/10.1007%2F978-3-642-45204-8_13)