

On Computing Sensitivity, Block Sensitivity, and Certificate Complexity for Boolean Formulas

HIROKI MORIZUMI^{1,a)}

Abstract: Sensitivity, block sensitivity, and certificate complexity are complexity measures for Boolean functions. If a Boolean function f is given by its truth table, it is known that there exist polynomial-time algorithms computing these three values of f . In this talk, we consider the problem computing sensitivity, block sensitivity, and certificate complexity for Boolean functions given by formulas.

This is a short talk. See [1] for polynomial-time algorithms of truth tables.

References

- [1] Scott Aaronson. Algorithms for boolean function query properties. *SIAM J. Comput.*, 32(5):1140–1157, 2003.

¹ Interdisciplinary Graduate School of Science and Engineering,
Shimane University, Shimane 690-8504, Japan

^{a)} morizumi@cis.shimane-u.ac.jp