DEC '12

S	M	T	W	T	F	S
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

CAP theorem with Integrity for KingCobra

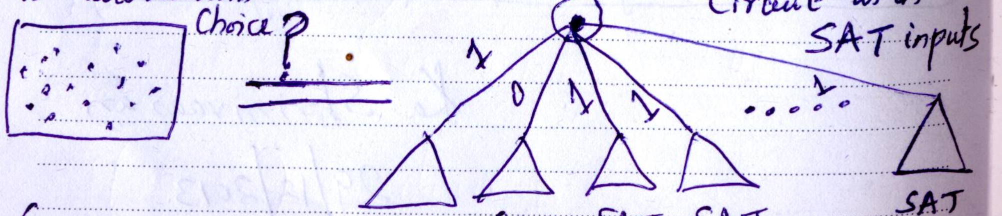
10/1/2014

Asfer - optional todo - add Apache Pig, Hive, Tez support for astronomical datasets (and) HBase NoSQL support.

The minimum convex hull of all possible random growth networks (in previous page) cannot be of polynomial size if $P \neq NP$. (This intuitively implies that minimum learning needed which is symbolized by Random growth network implication graph cannot be a polynomial in length of proof geodesic that is contained within minimum convex hull.)

Pseudorandom Choice ?

NC1 majority Circuit with SAT inputs



BPP or BPNC

BPP or BPNC

FEB '13

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

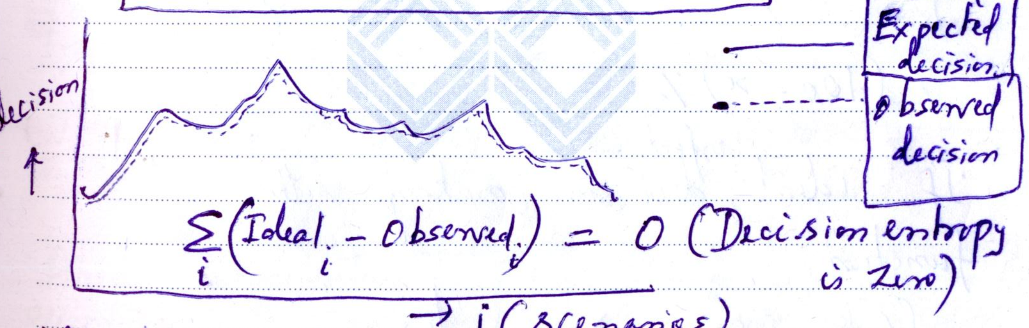
half or more SAT inputs circuits are satisfied and fed in 1 to NC1 majority ckt.

If voters are perfect, zero-error,

LHS is in P. In RHS each SAT voter has to be satisfied which is the democracy problem making it NP-Complete. If all voters are zero error RHS is NP-Complete since NC1 majority circuit takes inputs from SAT voters. Thus LHS is P & RHS is in NP if voters are zero error.

For zero-error the voter has to [the entropy has to be zero] make perfect decision in all possible scenarios -

Does such a voter exist ?



Number of all possible scenarios is infinite.

So above question itself could be undecidable and in RE & not recursive. Does that imply $P \neq NP$ is undecidable?

$\Rightarrow$ If all voters are perfect $P = NP$ and question of perfect voter existence is undecidable. Thus $P \stackrel{?}{=} NP$ is undecidable

Scenarios of decision making is finite then $P \stackrel{?}{=} NP$ is decidable.

Pseudorandom choice:

If x% of voters are imperfect, probability that elected choice is good

$\boxed{100} - \boxed{x}\% = (100-x)\%$

Majority Voting:

If x% of voters are imperfect, probability that elected choice is good $= (100-x)\%$

If ideal perfect decision making is the function

f(scenario) = decision

and actual decision making is the function

g(scenario) = decision

then the integral $\int_0^\infty \|f(x)-g(x)\| = 0$ for all perfect voters.

If x% of voters are imperfect,

$\int_0^\infty |f(x) - g(x)| > 0$ for x% of voters

An imperfect vote is an imperfect assignment to a Voter SAT CNF. That is voter CNFSAT is probabilistic.

Impossibility lemma: (Proof as in prior pages).

Election of perfect leader is possible iff voters are all perfect and zero error in both pseudorandom choice and majority voting.

(To verify: If this is Kenneth Arrow's impossibility theorem rephrased).

Above counterintuitive P=NP conclusion is for the question "Is perfect election of leader possible" and has P(Good) equation circuit as its basis.

Argument based on Law of Thermodynamics.

Entropy in a system is non decreasing. Entropy is Ø only at Ø Kelvin, which is unattainable. If nonzero entropy (disorder in a system) is thought of as source of any error of judgement then, this rules out perfect judgement. Thus, non zero entropy in thermodynamics $\Rightarrow P \neq NP$

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Ka Shrinivaasan
10/01/2014

Both arguments below:

1) Implication graphs - implication is undecidable
2) Perfect voter existence is undecidable (using P(Good) Circuits)

lead to $P \neq NP$, undecidability (in infinite case of scenarios and in most fragments of logic. Some fragments have decidable implications).

Both paths ① & ② above are independent of each other.

Above is a non-conventional non-textbook, unnatural proof approach to $P \neq NP$. Since diagonal proofs won't work, above unnatural paths are worth exploring.

Ka Shrinivaasan
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