# $P \neq N P$ 

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## 1 Introduction

Many theoretical computer scientists have hypothesized - correctly - that $P \neq N P$, but none were able to prove it. At last, that hypothesis is proved correct.

### 1.1 The Class $P$

The class $P$ consists of all decision problems that can be solved in polynomial time.

### 1.2 The Class $N P$

The class $N P$ consist of all decision problems that can be solved in nondeterministic polynomial time.

## 2 Acknowledging Others

Lamport [7] designed the useful $\mathrm{AT}_{\mathrm{E}} \mathrm{X}$ system. Cook [2] proved that Satisfiability is $N P$-complete. Gray and Slater [5] have a useful website on $\mathrm{T}_{\mathrm{E}} \mathrm{X}$ and ${ }^{\mathrm{E}} \mathrm{T}_{\mathrm{E}} \mathrm{X}$ for MacOSX. Kristensen and Østerbye [6] wrote a paper that has nothing to do with $N P$-completeness or $\mathrm{LA}_{\mathrm{E}} \mathrm{X}$. Demaine et al. [4] proved many things about folding 2D polygons into 3D polytopes. Demaine [3] began his career in computational geometry by studying folding and unfolding of polygons and polytopes. Apache [1] are constructing software to help with distributed computing.

## References

[1] The Apache Software Foundation. Welcome to Apache Hadoop! http: //hadoop.apache.org, Accessed on June 24, 2010.
[2] Stephen Cook. The complexity of theorem proving procedures. In Proceedings of the Third Annual ACM Symposium on Theory of Computing (STOC '71), Shaker Heights, Ohio, USA, pages 151-158, 3-5 May 1971.
[3] Erik Demaine. Folding and Unfolding. PhD thesis, University of Waterloo, 2001.
[4] Erik Demaine, Martin Demaine, Anna Lubiw, and Joseph O'Rourke. Examples, counterexamples, and enumeration results for foldings and unfoldings between polygons and polytopes. Technical Report 069, Smith College, July 2000.
[5] Gary L. Gray and Joe Slater. MacOSX $\mathrm{T}_{\mathrm{E}} \mathrm{X} / \mathrm{EAT}_{\mathrm{E}} \mathrm{X}$ web site. http:// mactex-wiki.tug.org/wiki/index.php?title=Main_Page, Accessed on 20 October 2009.
[6] Bent Bruun Kristensen and Kasper Østerbye. Roles: Conceptual abstraction theory and practical language issues. Theory and Practice of Object Systems, 2(3):143-160, 1996.
[7] Leslie Lamport. LATEX: A Document Preparation System. AddisonWesley, second edition, 1994.

