

Silly title of your review:
A serious title on an extra line if you need it

Your name, should you choose to include it

November 17, 2020

1 Introduction

What are the main contributions of the paper you are reviewing? This introduction should emphasize conceptual contributions and why they are important, avoiding technical definitions and details.

2 Preliminaries

Introduce important notation and definitions, like this:

Definition 1. The class **PP** consists of all languages L such that there exists a probabilistic Turing machine M where $x \in L$ iff $\Pr[M(x) = 1] \geq 1/2$.

3 Main Results

Next, you should describe the main results of the paper at a technical level, giving precise theorem statements. Then you should choose one of these main results and give a detailed proof. Depending on the topic you choose, it may be difficult to do this concisely. If that is the case, you may decide to prove a special case of the result (that illustrates most of the main ideas). You might also “black-box out” technical lemmas that require lengthy calculations but are not so conceptually important, so long as these lemmas are stated precisely and you can prove how they fit together.

This is a theorem due to Beigel, Reingold, and Spielman [BRS91]. (The reference for the journal version of the paper is [BRS95].)

Theorem 2. *PP is closed under intersection. That is, if $L_1, L_2 \in \mathbf{PP}$, then $L_1 \cap L_2 \in \mathbf{PP}$.*

Proof. I’m not gonna do this. □

4 Conclusion

Further discussion of the implications of the results you’ve described and directions for future research.

References

- [BRS91] Richard Beigel, Nick Reingold, and Daniel A. Spielman. PP is closed under intersection (extended abstract). In Cris Koutsougeras and Jeffrey Scott Vitter, editors, *Proceedings of the 23rd Annual ACM Symposium on Theory of Computing, May 5-8, 1991, New Orleans, Louisiana, USA*, pages 1–9. ACM, 1991.
- [BRS95] Richard Beigel, Nick Reingold, and Daniel A. Spielman. PP is closed under intersection. *Journal of Computer and System Sciences*, 50(2):191–202, 1995.