

# Magic Gradient Descent\*

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**Abstract**—Describe in a few sentences what the paper is about and why it is interesting to read it.

## I. INTRODUCTION

Some general introducing sentences about the topic, motivation and relevance of problem/algorithm.

In this paper we give an introduction to the results presented in paper(s) [?].

We present the problem statement (optimization problem) the main results/algorithms, discuss the underlying ideas and illustrate the results by numerical simulations.

Notation. Define notation.

## II. PROBLEM STATEMENT AND BACKGROUND

Provide a mathematical problem description. If necessary, some background material.

## III. MAIN RESULTS

Present main theorems/algorithm. Explain idea, explain algorithm, provide a convergence proof, discuss main properties (advantages and disadvantages) keks Use algorithm environment in Latex to present algorithm (pseudo-code)

## IV. EXAMPLES

Show and discuss simulation examples etc....

## V. CONCLUSIONS

Summarize the main points (with more details than in the preceding introduction). The paper should not be between 4 and 8 pages.

## APPENDIX

Add for example your Matlab code here. (Code should be nicely formatted and documented).

Appendixes should appear before the acknowledgment.

## ACKNOWLEDGMENT

## REFERENCES

[1] bla

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