

Fast Localization for Wireless Sensor Network

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Abstract—This paper presents a novel approach for wireless sensor network localization based on recurrent neural network. The algorithm utilizes signals between neighboring nodes in wireless sensor network and recurrent neural network model to resolve localization for all sensors. Theoretical proves the convergence of this algorithm. The iterative process of the algorithm fits for parallel processing of wireless sensor network localization by nature. Experimental results prove the correctness of this algorithm compare with state of art related algorithms.

Index Terms—Wireless Sensor Network, Localization, Recurrent Neural Network

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Shuai Li Biography text here.

I. INTRODUCTION

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mds

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II. CONCLUSION

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APPENDIX A

PROOF OF THE FIRST ZONKLAR EQUATION

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Hao Men Biography text here.

APPENDIX B

Appendix two text goes here.

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REFERENCES

- [1] H. Kopka and P. W. Daly, *A Guide to L^AT_EX*, 3rd ed. Harlow, England: Addison-Wesley, 1999.

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