

Accepted Manuscript

Mobile Robots Path Planning: Electrostatic Potential Field Approach

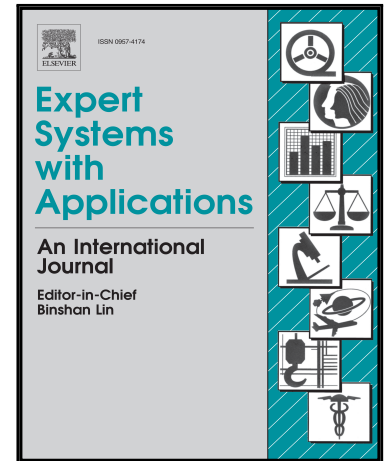
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PII: S0957-4174(18)30063-0
DOI: [10.1016/j.eswa.2018.01.050](https://doi.org/10.1016/j.eswa.2018.01.050)
Reference: ESWA 11798

To appear in: *Expert Systems With Applications*

Received date: 9 August 2017
Revised date: 25 December 2017
Accepted date: 27 January 2018

Please cite this article as: Farhad Bayat, Sepideh Najafi-Nia, Morteza Aliyari, Mobile Robots Path Planning: Electrostatic Potential Field Approach, *Expert Systems With Applications* (2018), doi: [10.1016/j.eswa.2018.01.050](https://doi.org/10.1016/j.eswa.2018.01.050)



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Highlights

- Electrostatic potential field theory is used to solve robot's path planning problem.
- All obstacles' features are integrated into a scalar potential field to make decision.
- Collision-free and fast approaching objectives are achieved via an optimization.
- Using a scalar potential field makes it extremely simple and practically feasible.
- The proposed method can be simply applied to both static and dynamic environments.

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