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*Corrigendum*

# Corrigendum to "Mobile Robot Simultaneous Localization and Mapping Based on a Monocular Camera"

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In the article titled "Mobile Robot Simultaneous Localization and Mapping Based on a Monocular Camera" [1], there were errors in (7), (8), (9), (14), (16), (18), and (19), which should be corrected as follows:

$$\arg\min_{\mathbf{x}} \sum \left\| r_p(\mathbf{x}) \right\|^2, \tag{7}$$

$$\arg\min_{\mathbf{x},d} \sum L\left(d(u) - d_g(u)\right) \left\| r_p(\mathbf{x}) \right\|^2 + \left\| r_d(u,d) \right\|^2,$$

$$L(x) = \begin{cases} 1, & |x| \le \sigma, \\ 0, & \text{others}, \end{cases} \tag{8}$$

$$\arg\min_{\mathbf{x}} \sum L\left(d - d_g\right) \left\| r_p(\mathbf{x}) \right\|^2, \tag{9}$$

$$\arg\min_{d} \sum \left\| r_d(u,d) \right\|^2, \tag{14}$$

$$\min_{\mathbf{x}} \sum w\left(r_p\right) \left\| r_p(\mathbf{x}) \right\|^2, \tag{16}$$

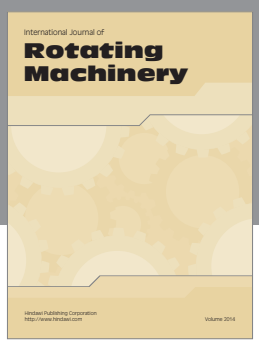
$$\xi = \arg\min_{\xi} \sum_i w(e_i) \left\| e_i \right\|^2, \tag{18}$$

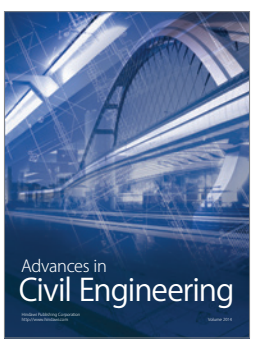
$$s\left(u_j^i\right) = \begin{cases} \left\| r_j \right\| \le \sigma_i, & \text{accept}, \\ \left\| r_j \right\| > \sigma_i, & \text{reject}, \end{cases} \tag{19}$$

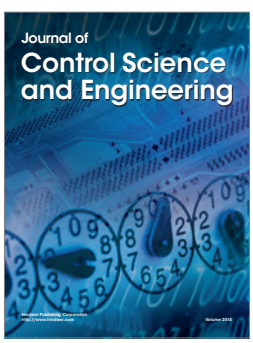
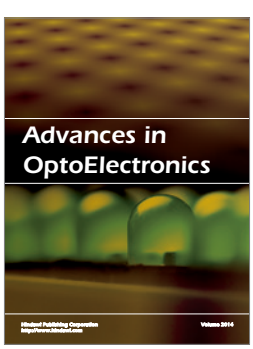
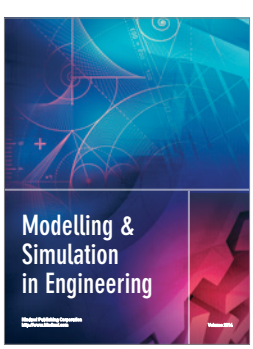
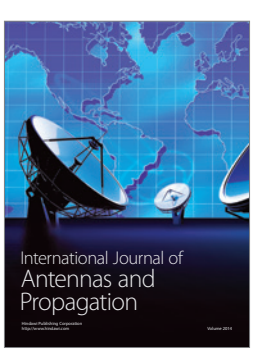
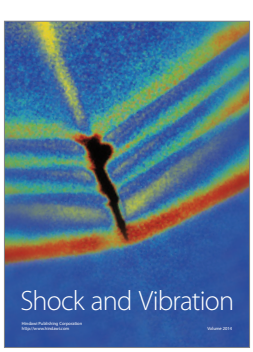
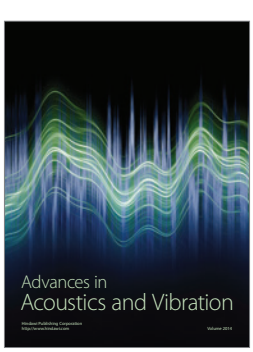
$$r_j = \pi\left(H_i v_j^i\right) - u_j^i.$$

## References

[1] S. Jia, K. Wang, and X. Li, "Mobile robot simultaneous localization and mapping based on a monocular camera," *Journal of Robotics*, vol. 2016, Article ID 7630340, 11 pages, 2016.



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