

Erratum

for the paper “Detecting global optimality and extracting solutions in GloptiPoly” by Didier Henrion and Jean-Bernard Lasserre, published as a chapter in the book D. Henrion, A. Garulli (Editors). Positive polynomials in control. Lecture Notes on Control and Information Sciences, Vol. 312, Springer Verlag, Berlin, January 2005.

In Section 2.2.1 the first expression of moment matrix $M_k(y^*)$ is incorrect. The correct expression is

$$M_k(y^*) = \sum_{j=1}^r \lambda_j v_k(x^*(j)) v_k(x^*(j))^T = V^* (V^*)^T$$

where

$$\lambda_j \geq 0, \quad \sum_{j=1}^r \lambda_j = 1$$

are nonnegative weights. Consequently

$$V^* = \left[\begin{array}{cccc} \sqrt{\lambda_1} v_k(x^*(1)) & \sqrt{\lambda_2} v_k(x^*(2)) & \cdots & \sqrt{\lambda_r} v_k(x^*(r)) \end{array} \right].$$

The following expression $M_k(y^*) = VV^T$ and the remainder of the paper are not affected by this typo.

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