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CORRECTION

Correction to: Kernel-based interpolation at approximate Fekete points

Toni Karvonen[1,2] · Simo Särkkä[1] · Ken'ichiro Tanaka[3]

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Correction to: Numerical Algorithms
https://doi.org/10.1007/s11075-020-00973-y

- An equation in Section 2.1 has been corrected to

$$\begin{aligned}
|f(\boldsymbol{x}) - s_f(\boldsymbol{x})| &= \left| \left\langle f, K(\cdot, \boldsymbol{x}) - \sum_{k=1}^{n} K(\cdot, \boldsymbol{x}_k) u_k(\boldsymbol{x}) \right\rangle_{\mathcal{H}_K(\Omega)} \right| \\
&\leq \|f\|_{\mathcal{H}_K(\Omega)} \left\| K(\cdot, \boldsymbol{x}) - \sum_{k=1}^{n} K(\cdot, \boldsymbol{x}_k) u_k(\boldsymbol{x}) \right\|_{\mathcal{H}_K(\Omega)} \\
&=: \|f\|_{\mathcal{H}_K(\Omega)} P_{\mathcal{X}_n}(\boldsymbol{x})
\end{aligned}$$

The online version of the original article can be found at https://doi.org/10.1007/s11075-020-00973-y.

✉ Toni Karvonen
tkarvonen@turing.ac.uk

Simo Särkkä
simo.sarkka@aalto.fi

Ken'ichiro Tanaka
kenichiro@mist.i.u-tokyo.ac.jp

1 Department of Electrical Engineering and Automation, Aalto University, Espoo, Finland

2 The Alan Turing Institute, London, UK

3 Department of Mathematical Informatics, Graduate School of Information Science and Technology, University of Tokyo, Tokyo, Japan

from

$$
\begin{aligned}
|f(\boldsymbol{x}) - s_f(\boldsymbol{x})| &= \left| \left\langle f K(\cdot, \boldsymbol{x}) - \sum_{k=1}^{n} K(\cdot, \boldsymbol{x}_k) u_k(\boldsymbol{x}) \right\rangle_{\mathcal{H}_K(\Omega)} \right| \\
&\leq \|f\|_{\mathcal{H}_K(\Omega)} \left\| K(\cdot, \boldsymbol{x}) - \sum_{k=1}^{n} K(\cdot, \boldsymbol{x}_k) u_k(\boldsymbol{x}) \right\|_{\mathcal{H}_K(\Omega)} \\
&=: \|f\|_{\mathcal{H}_K(\Omega)} P_{\mathcal{X}_n}(\boldsymbol{x}).
\end{aligned}
$$

- An inline equation in Section 2.2 has been corrected to $f = \sum_{\ell=1}^{\infty} \langle f, \varphi_\ell \rangle_{\mathcal{H}_K(\Omega)} \varphi_\ell$ from $f = \sum_{\ell=1}^{\infty} \langle \varphi_\ell \rangle_{\mathcal{H}_K(\Omega)} \varphi_\ell$.
- An equation in Section 2.2 has been corrected to

$$
\begin{aligned}
\langle f, K(\cdot, \boldsymbol{x}) \rangle_{\mathcal{H}_K(\Omega)} &= \sum_{\ell,k=1}^{\infty} \langle \varphi_\ell, \varphi_k \rangle_{\mathcal{H}_K(\Omega)} \langle f, \varphi_\ell \rangle_{\mathcal{H}_K(\Omega)} \varphi_k(\boldsymbol{x}) \\
&= \sum_{\ell=1}^{\infty} \langle f, \varphi_\ell \rangle_{\mathcal{H}_K(\Omega)} \varphi_\ell(\boldsymbol{x}) \\
&= f(\boldsymbol{x})
\end{aligned}
$$

from

$$
\begin{aligned}
\langle K(\cdot, \boldsymbol{x}) \rangle_{\mathcal{H}_K(\Omega)} &= \sum_{\ell,k=1}^{\infty} \langle \varphi_\ell \varphi_k \rangle_{\mathcal{H}_K(\Omega)} \langle \varphi_\ell \rangle_{\mathcal{H}_K(\Omega)} \varphi_k(\boldsymbol{x}) \\
&= \sum_{\ell=1}^{\infty} \langle \varphi_\ell \rangle_{\mathcal{H}_K(\Omega)} \varphi_\ell(\boldsymbol{x}) \\
&= f(\boldsymbol{x}).
\end{aligned}
$$

- An inline equation in Section 3.2 has been corrected to $f_\ell = \langle f, \varphi_\ell \rangle_{\mathcal{H}_K(\Omega)}$ from $f_\ell = \langle \varphi_\ell \rangle_{\mathcal{H}_K(\Omega)}$.
- An equation in Section 3.3 has been corrected to

$$
\mathcal{H}_K(\Omega) = \left\{ f \in L^2(\mu) : \ \|f\|_{\mathcal{H}_K(\Omega)}^2 = \sum_{\ell=1}^{\infty} \frac{\langle f, \psi_\ell \rangle_{L^2(\mu)}^2}{\lambda_\ell} < \infty \right\}
$$

from

$$
\mathcal{H}_K(\Omega) = \left\{ f \in L^2(\mu) : \ \|f\|_{\mathcal{H}_K(\Omega)}^2 = \sum_{\ell=1}^{\infty} \frac{\langle f \psi_\ell \rangle_{L^2(\mu)}^2}{\lambda_\ell} < \infty \right\}.
$$

- An equation in Section 3.3 has been corrected to

$$
T(L^2(\mu)) = \left\{ f \in L^2(\mu) : \ \|f\|_{\mathcal{H}_K(\Omega)}^2 = \sum_{\ell=1}^{\infty} \frac{\langle f, \psi_\ell \rangle_{L^2(\mu)}^2}{\lambda_\ell^2} < \infty \right\} \subset \mathcal{H}_K(\Omega)
$$

from

$$T(L^2(\mu)) = \left\{ f \in L^2(\mu) : \ \|f\|^2_{\mathcal{H}_K(\Omega)} = \sum_{\ell=1}^{\infty} \frac{\langle \psi_\ell \rangle^2_{L^2(\mu)}}{\lambda_\ell^2} < \infty \right\} \subset \mathcal{H}_K(\Omega)$$

- An equation in Section 4.3 has been corrected to

$$|g_i(x_i)| = \left| \langle g, K_i(\cdot, x_i) \rangle_{\mathcal{H}_{K_i}(\Omega_i)} \right| \leq \|g_i\|_{\mathcal{H}_{K_i}(\Omega_i)} \text{ and } |s_{i,g_i}(x_i)| \leq \|g_i\|_{\mathcal{H}_{K_i}(\Omega_i)}$$

from

$$|g_i(x_i)| = \left| \langle K_i(\cdot, x_i) \rangle_{\mathcal{H}_{K_i}(\Omega_i)} \right| \leq \|g_i\|_{\mathcal{H}_{K_i}(\Omega_i)} \text{ and } |s_{i,g_i}(x_i)| \leq \|g_i\|_{\mathcal{H}_{K_i}(\Omega_i)}.$$