

Corrections

Corrections to “An Approach to Subjective Computing: A Robot That Learns From Interaction With Humans”

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In the article above [1], the sentence reading “As outlined above, reciprocity holds between $\delta(\hat{r})$ and $\alpha(V \rightarrow \hat{R})$ ” should read “As outlined above, reciprocity holds between $\delta(\hat{r})$ and $\alpha(C \rightarrow \hat{R})$.”

Also, there was mistake in Table I, the corrected table is as follows.

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TABLE I
RELATIONAL CONSTRUCTION OF THE COACHED RL AGENT

Observable \ Domain	D_0 : <i>algorithmic</i>	D_1 : <i>functional</i>	D_2 : <i>mental</i>
<i>Interface</i>	\hat{r}	AF	$\delta(AF)$
<i>Interpretation</i>	C	ER	$\alpha(ER)$
<i>Learning</i>	\hat{R}	IP	$\alpha(IP)$
<i>Relational arrangement</i>	$\delta(\hat{r}) \rightleftharpoons \alpha(C \rightarrow \hat{R})$	$\delta(AF) \rightleftharpoons \alpha(ER \rightarrow IP)$	

The notations are defined as follows:

D_0 : \hat{r} reward value; C contingency and causality detection; \hat{R} updated reward function.

D_1 : AF allocation of feedback; ER estimation of relevance; IP improvement of performance.

Relational arrangement: $\alpha(x)$ means x is self-referentially arranged;

$\delta(x)$ means that the agent is directly coupled to x ; $\delta(x) \rightleftharpoons \alpha(y)$ means x and y are reciprocal.

REFERENCES

- [1] P. Grüneberg and K. Suzuki, “An approach to subjective computing: A robot that learns from interaction with humans,” *IEEE Trans. Automon. Mental Develop.*, vol. 6, no. 2, pp. 5–18, Mar. 2014.