Can we take AI to the next level by building robots that fear for their own safety?

There might be a way, though, to give robots feelings, say neuroscientists Kingson Man and Antonio Damasio. Simply build the robot with the ability to sense peril to its own existence. It would then have to develop feelings to guide the behaviors needed to ensure its own survival.

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Man and Damasio propose a strategy for imbuing machines (such as robots or humanlike androids) with the "artificial equivalent of feeling."

. . .

An <u>intelligent robot</u>, of course, would need to identify lots of features in its environment, while also keeping track of its own internal condition. By representing environmental states computationally, a deep learning machine could merge different inputs into a coherent assessment of its situation. Such a smart machine, Man and Damasio note, could "bridge across sensory modalities" — learning, for instance, how lip movements (visual modality) correspond to vocal sounds (auditory modality).

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"Rather than having to hard-code a robot for every eventuality or equip it with a limited set of behavioral policies, a robot concerned with its own survival might creatively solve the challenges that it encounters," Man and Damasio suspect. "Basic goals and values would be organically discovered, rather than being extrinsically designed."

Read full, original post: A will to survive might take AI to the next level