Application of Hopfield neural network on the energy-saving robot path finding and robot arm control.

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Abstract

Robots are important tools in nuclear power plants since they could receive radiation without doing damage other than economy. It could be foreseen that once a material for robot fabricating that is radiation-resist enough, robot will be very universal in nuclear power plants. On the other hand, algorithms controlling the robot will be very important too. The complicated ground conditions in nuclear power plants require the robot to be able to climb stairs, avoid or step over various kinds of obstacles and make right decisions for saving energy.

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