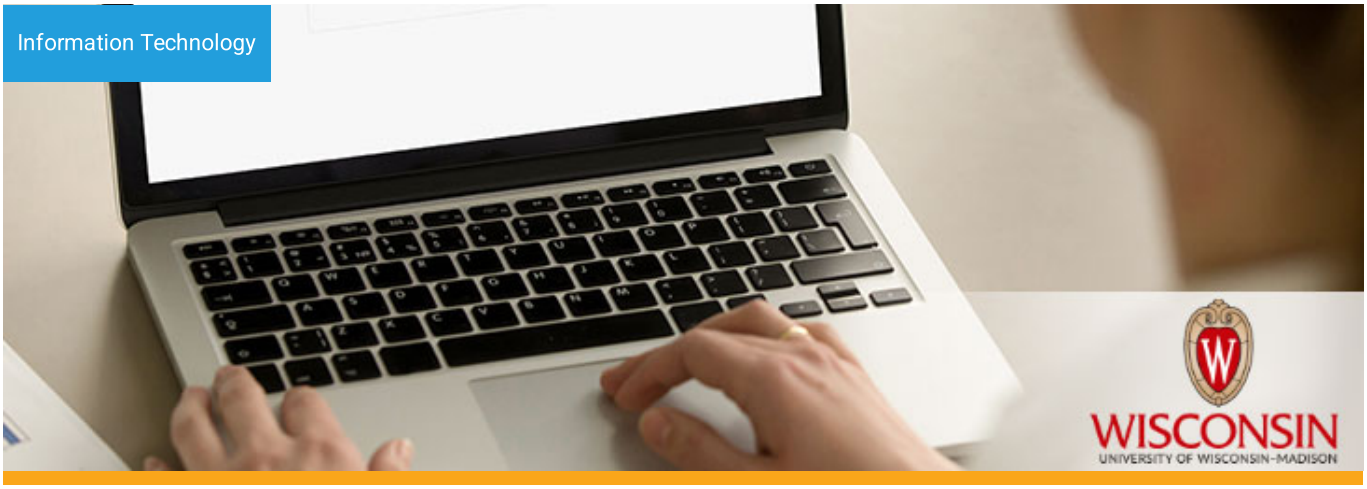
Information Technology



Training System For Artificial Neural Networks Having A Global Weight Constrainer

View U.S. Patent No. 11,526,760 in PDF format.

WARF: P180189US01

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The Invention

An architecture for training the weights of artificial neural networks provides a global constrainer modifying the neuron weights in each iteration not only by the back-propagated error but also by a global constraint constraining these weights based on the value of all weights at that iteration. The ability to accommodate a global constraint is made practical by using a constrained gradient descent which approximates the error gradient deduced in the training as a plane, offsetting the increased complexity of the global constraint.

Additional Information

For More Information About the Inventors

- Vikas Singh

Publications

- Explicitly Imposing Constraints in Deep Networks via Conditional Gradients Gives Improved Generalization and Faster Convergence

Tech Fields

- Information Technology : Computing methods, software & machine learning
- Information Technology : Image processing

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