

Symposium (Oral) | Symposium | New developments in computing technique based on optical neural network

[12p-B414-1~7]New developments in computing technique based on optical neural network

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△ : Presentation by Applicant for JSAP Young Scientists Presentation Award

▲ : English Presentation

▼ : Both of Above

No Mark : None of Above

2:00 PM - 2:30 PM

[12p-B414-3]Cellular Automata Reservoir Computing Acceleration

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Keywords:reservoir computing, cellular automata

Neural networks based on deep learning require a large amount of computational cost in return for high inference accuracy. For reducing training and implementation costs, reservoir computing substitutes a parameter-fixed recurrent neural network for the hidden layers that occupy the majority of computational cost in a neural network. This lecture introduces a reservoir computing method using cellular automaton and its implementation.