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**Constrained Neural Approaches to
Quadratic Assignment Problems.**

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Constrained neural approaches to quadratic assignment problems

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Abstract

In this paper, we discuss analog neural approaches to Quadratic Assignment Problem (QAP). They employ hard constraint scheme to restrict the domain space, and they can obtain much improved solutions than the conventional neural approaches. Since few strong heuristics for QAP have been known so far, our approaches are good alternatives that can obtain fairly good solutions in a short time. Some of them can also be applied to large-scale problems, say of size $N \geq 300$.