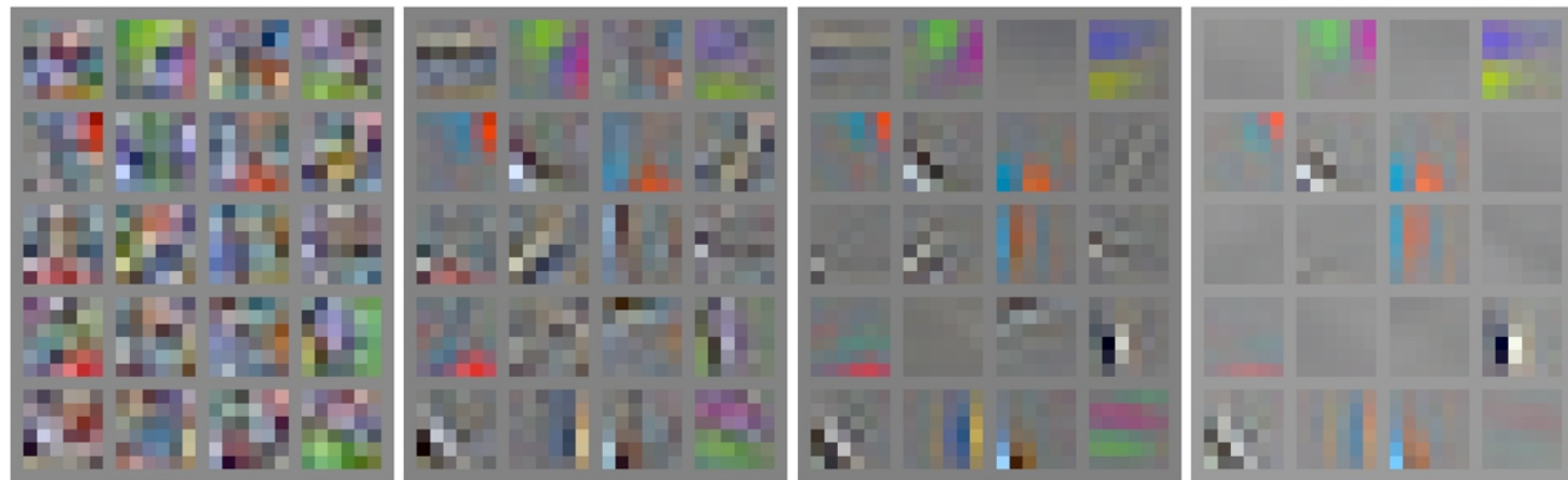


Information Maximization Training of Restricted Boltzmann Machines

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- When RBMs are applied to continuous data, they gradually gain meaningless uniform feature detectors as learning proceeds.



Duration of RBM training

- We here developed a regularized RBM algorithm that maximizes data information encoded by RBMs to ease this problem.
- Experiments on natural images revealed that our algorithm successfully suppress the generation of uniform detectors



Control

Proposed