

Incremental Natural Actor-Critic Algorithms

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- We developed four new actor-critic algorithms and provided their convergence analysis.
- Our algorithms are based on conventional & natural gradients.
- Our results extend prior convergence results for actor-critic methods by Konda and Tsitsiklis by
 - using temporal difference learning in both actor & critic,
 - incorporating natural gradients.
- Our results extend prior empirical studies of natural actor-critic methods by Peters et al. by
 - providing the first convergence proofs,
 - presenting the first fully incremental algorithms.