

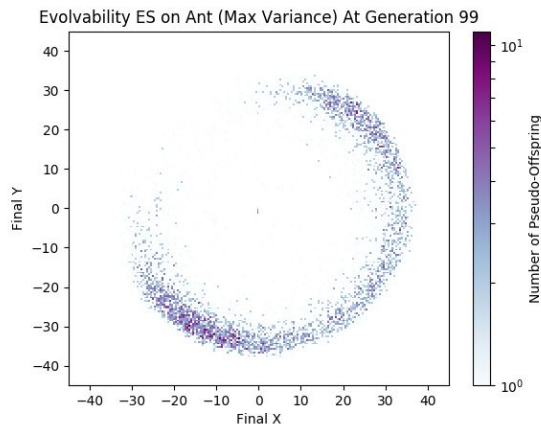
Evolvability ES: Scalable Evolutionary Meta-Learning



Uber AI Labs

By Alexander Gajewski, Jeff Clune, Kenneth O. Stanley, and Joel Lehman

- Evolvability ES is a meta-learning algorithm inspired by Evolution Strategies [1]
- Surprisingly, Evolvability ES finds parameters such that at test time, **random** perturbations result in diverse behaviors
- In a simulated Ant locomotion domain, adding Gaussian noise to the parameters results in policies which move in many different directions



[1] Salimans et al., Evolution Strategies as a Scalable Alternative to Reinforcement Learning, 2017.