3-Snapshot Soup of Mnih et al. (2015) Top-3 Mixed Ensemble (majority vote) Top-3 Ensemble (logistic average) with Mnih et al. (2015) Top-3 Mixed Ensemble (average) Top-3 Mixed Ensemble (logistic average) Top-3 Ensemble (average) with Mnih et al. (2015) Mnih et al. (2015) Random Play 3-Snapshot Ensemble (average) with Mnih et al. (2015) 3-Snapshot Ensemble (logistic average) with Mnih et al. (2015) Interpretable CNN Top-3 Ensemble (average) with Mnih et al. (2015) with Huber Loss and Adam Top-3 Soup of Mnih et al. (2015) Top-3 Ensemble (logistic average) with Mnih et al. (2015) with Huber Loss and Adam Mnih et al. (2013) 3-Snapshot Ensemble (majority vote) with Mnih et al. (2015) with Huber Loss and Adam 3-Snapshot Soup of Mnih et al. (2013) 3-Snapshot Ensemble (majority vote) with Mnih et al. (2013) Top-3 Ensemble (majority vote) with Mnih et al. (2013) 3-Snapshot Ensemble (logistic average) with Mnih et al. (2013) 3-Snapshot Ensemble (average) with Mnih et al. (2013) 3-Snapshot Soup of Mnih et al. (2015) with Huber Loss and Adam Mnih et al. (2015) with Huber Loss and Adam Top-3 Ensemble (majority vote) with Mnih et al. (2015) with Huber Loss and Adam Top-3 Soup of Mnih et al. (2013) Top-3 Ensemble (average) with Mnih et al. (2013) Top-3 Soup of Mnih et al. (2015) with Huber Loss and Adam 3-Snapshot Ensemble (majority vote) with Mnih et al. (2015) Top-3 Ensemble (logistic average) with Mnih et al. (2013) 3-Snapshot Ensemble (average) with Mnih et al. (2015) with Huber Loss and Adam 3-Snapshot Ensemble (logistic average) with Mnih et al. (2015) with Huber Loss and Adam Top-3 Ensemble (majority vote) with Mnih et al. (2015) 0 200 400 600 800 Reward per Episode

Reward distribution for Seaguest