

QUALITY DIVERSITY

Quality diversity algorithms, rather than finding a specific good solution to a problem, construct archives of different high performing solutions. “Different” can be defined in various ways, an obvious example being “solutions that look different to a vision model” [1]. A popular¹ quality diversity algorithm is the nicely named Multi-dimensional Archive of Phenotypic Elites (MAP-Elites) [2].

Index of Sources

- [1] A. Kumar *et al.*, “Automating the Search for Artificial Life with Foundation Models,” no. arXiv:2412.17799. arXiv, Dec. 2024. doi: 10.48550/arXiv.2412.17799.
- [2] J.-B. Mouret and J. Clune, “Illuminating Search Spaces by Mapping Elites,” no. arXiv:1504.04909. arXiv, Apr. 2015.

¹At least in this lab