(a) SharpZO Framework Overview
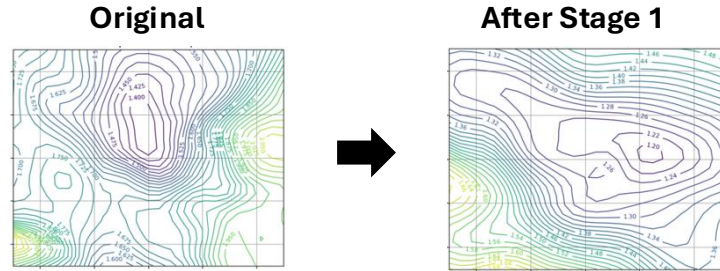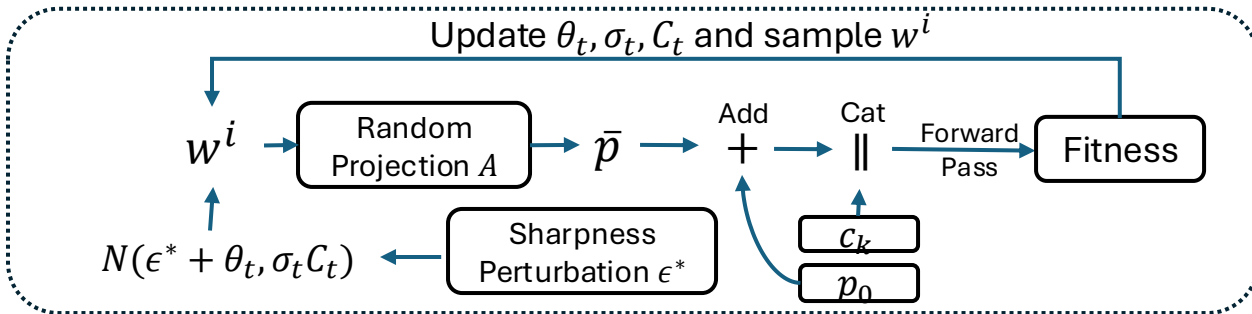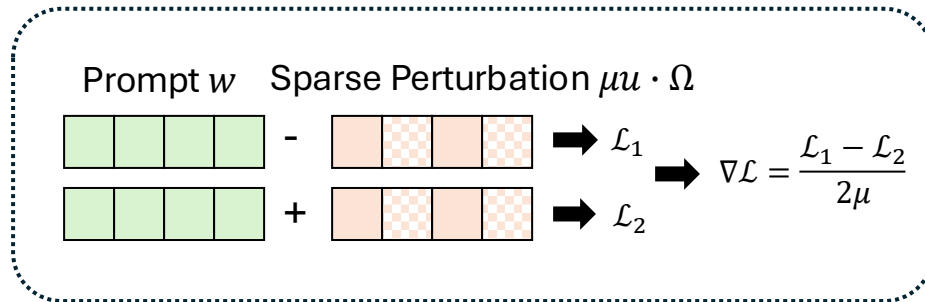
(b) Evaluation on Loss landscape

(c) Stage 1: Sharpness-aware CMA-ES

(d) Stage 2: Sparse ZO optimization