

Envelope Methods Suite — One-Page Overview

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Overview

The Envelope Methods Suite unifies four lightweight, interpretable frameworks for dynamic systems: drift detection, statistical-envelope stability, equilibrium allocation, and decision coherence.

1. HCM — Histogram Confidence Method

Real-time, nonparametric drift detector using adaptive histograms and precomputed confidence bounds.

DOI: 10.5281/zenodo.17765246

GitHub: <https://github.com/StevenSrebranig/HCM>

2. SECL — Statistical-Envelope Control Loops

Distribution-bound control architecture for drift-prone systems.

DOI: 10.5281/zenodo.17715671

GitHub: <https://github.com/StevenSrebranig/SECL>

3. MEO / Opportunity Optimization

Equilibrium-seeking allocator using marginal utility, marginal cost, and dynamic opportunity cost.

DOI: 10.5281/zenodo.17705719

GitHub: <https://github.com/StevenSrebranig/MEO>

4. WCS/DR — Weighted Cohesion Score & Dissolution Risk

Decision-coherence and future-self stability framework.

DOI: 10.5281/zenodo.17691769

GitHub: <https://github.com/StevenSrebranig/WCS-DR>

Conceptual Flow

HCM detects change → SECL stabilizes → MEO allocates → WCS/DR evaluates coherence.

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