

The revbadge Package

Custom Highlighting for Academic Revisions

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Abstract—This document serves as both the official user manual and a compilation demonstration for the `revbadge` package. We present examples of how to address different reviewers using distinct color schemes without breaking tough, two-column academic structures.

1 INTRODUCTION & PACKAGE PURPOSE

With the increasing rigor of peer-review processes, keeping track of manuscript modifications has become crucial. The `revbadge` package provides a dual-component architecture consisting of the multi-line `revbadge` block environment and the `\revbadgeinline` macro for tight mid-sentence updates.

2 CORE COMMANDS & ENVIRONMENTS

2.1 Inline Edits

Reviewer 3 pointed out a technical term error. We have corrected the phrase `2 stochastic descent` to match their preferred domain nomenclature. As shown by this example, it handles micro-edits gracefully without breaking paragraph rendering or line spacing.

2.2 Block Level Revisions

For larger text changes or entire sections, use the `revbadge` environment:

2.2.1 Methodology Updates

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Our core algorithm relies on a highly modular pipeline. Reviewer 1 pointed out a structural flaw in our original baseline model equation. Consequently, we have revised the mathematical formulation to ensure convexity.

2.3 Nested Frameworks and Mathematics

The environment naturally preserves mathematical structures inside columns without spacing bleed and allows for internal nesting:

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We update our primary objective function to include a regularization parameter λ . The new optimization problem is formulated as follows:

4.1

$$\min_{\theta} \mathcal{L}(\theta) + \lambda \|\theta\|_2^2 \quad (1)$$

This formulation guarantees a unique global minimum under standard Lipschitz continuity conditions.

As demonstrated above, the mathematical rigor is preserved, and the box automatically scales to fit perfectly within a single column.

2.4 Table Integration

Reviewer 1 requested updated evaluation metrics in our comparative analysis. As shown in Table 1, we can seamlessly embed tracking badges directly inside tabular environments to point out specific data corrections.

TABLE 1
Baseline Performance Metrics Comparison

Method	Accuracy (%)	F1-Score	Latency (ms)
ResNet-50	76.2	0.74	12.5
ViT-Base	81.4	0.80	24.1
Ours	5.1 84.9	0.83	18.4

2.5 Custom Layout Formatting

Reviewer 2 required an explicit declaration of our hardware execution environment:

Hardware Specs

All evaluations executed natively on an NVIDIA H100 GPU cluster.
The total execution window spanned exactly 48 continuous hours.

3 CROSS-REFERENCING TRACKER

Because the package automatically binds internal counters to `cleveref`, referencing your edits is seamless and context-aware. `revbadge` intelligently distinguishes between independent highlights and those nested within structural elements: if an edit is placed within a section, `\cref` will resolve to that section's location, whereas standalone edits reference their specific badge identifier.

For example, `\cref{rev:short}` outputs as `highlight 1` (a standalone badge), while `\cref{rev:baseline_clarity}` directs the reader to the structural location section 2.2.1. Similarly, the `tabular` adjustment `\cref{rev:table_update}` points to highlight 5, and the nested math formula `\cref{rev:math_fix_2}` maps cleanly to its containing section, section 2.3.