February 7, 2026

To the Editor-in-Chief,
IEEE Transactions on Neural Networks and Learning Systems (TNNLS)

Subject: Submission of Manuscript "Reliability is a System Property"

Dear Editor,

I am pleased to submit the enclosed manuscript entitled "Reliability is a System Property" for consideration for publication in IEEE Transactions on Neural Networks and Learning Systems.

This paper proposes a paradigm shift in AI reliability: rather than attempting to harden individual deep learning components against all possible failures, we introduce a system-level governance architecture, **resED**, which wraps opaque generative models in a deterministic "Representation-Level Control Surface" (RLCS). Our core contribution is demonstrating that reliability can be guaranteed as an architectural property—specifically, the ability to fail safely and observably—even when using volatile, black-box components.

To ensure the highest standards of transparency and reproducibility, this work:

1. Explicitly scopes its claims to exclude correctness or adversarial robustness guarantees, focusing solely on failure observability and containment.

2. Highlights critical architectural limitations, specifically "Normalization Blindness" in LayerNorm-based Transformers.

3. Provides a full reference implementation of the governance logic via the `resLIK` R package (available on CRAN) and makes the complete codebase available on GitHub.

We believe this work addresses a critical gap in the safe deployment of generative AI by providing a practical, scalable mechanism for "circuit-breaking" model hallucinations. This work does not compete with OOD detectors; it formalizes when such detectors should be trusted.

None of the authors have a conflict of interest to disclose.

Thank you for your consideration.

Sincerely,

MD. Arshad
Department of Computer Science
Jamia Millia Islamia
arshad10867c@gmail.com