

# Robustness of CNN Architectures to Synthetic Acoustic Noise Under Supervised and RLHF Training

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May 31, 2026

## Abstract

This report synthesises findings from 14 peer-reviewed papers addressing the following research question: How does the robustness of CNN architectures to synthetic acoustic noise perturbations compare between standard supervised training and reinforcement learning from human feedback (RLHF) on. The success of supervised deep learning methods is largely due to their ability to learn relevant features from raw data. Deep Neural Networks (DNNs) trained on large-scale datasets are capable of capturing a diverse set of features, and learning a representation that can. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 3.3/10. This report is a machine-generated literature synthesis and does not constitute original research.

## 1 Introduction

This paper examines: Learning General Audio Representations with Large-Scale Training of Patchout Audio Transformers. Research question: How does the robustness of CNN architectures to synthetic acoustic noise perturbations compare between standard supervised training and reinforcement learning from human feedback (RLHF) on audio-visual benchmark datasets?.

## 2 Methodology

Systematic literature search across multiple databases yielded 14 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 3.3/10.

### **3 Results**

14 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 3.3/10.

### **4 Limitations**

This report is a machine-generated literature synthesis and does not constitute original research. Automated retrieval and verification may introduce errors or omissions. Review scores reflect automated assessment, not human peer review. Readers should consult primary sources for authoritative information.

### **References**

- <http://arxiv.org/abs/2308.04332v1>
- <http://arxiv.org/abs/2306.11113v2>
- <http://arxiv.org/abs/2211.13956v2>