

Provisional Patent Draft: NeuraPlumb Trust Stack System

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Title of Invention

AI Trust Framing and Diagnostic Control System for Field Service Evaluations

Field of the Invention

This invention relates to artificial intelligence systems used for evaluating skilled trade work such as plumbing, focusing specifically on user-facing interpretation, legal liability management, and emotional clarity in AI-generated diagnostics.

Background of the Invention

AI systems that generate scores, recommendations, or evaluations in skilled trades (e.g., plumbing, HVAC, electrical) often fail to consider the interpretive context for multiple parties such as clients, plumbers, and inspectors. Furthermore, AI can misrepresent scope when evaluating work outside the intended area, and often presents information in technically accurate but emotionally insensitive ways. This invention addresses trust, role-based communication, and control of interpretive framing in AI diagnostics.

Summary of the Invention

The Trust Stack system is a layered suite of AI logic enhancements designed to control how diagnostic output is generated and perceived by different audiences. It includes mechanisms for framing language, isolating scope, adapting emotional tone, and feeding user trust signals back into the system for refinement.

Core Components and Claims

1. AI Trust Messaging System - Adjusts AI phrasing to be emotionally intelligent and trust-building, depending on whether the viewer is a client, plumber, or third party.
2. Multi-Party Perception Layer - Dynamically alters report presentation without changing factual content to match audience needs.
3. AI + Scope-Limiting Shield - Restricts AI evaluation to human-defined scope of work, avoiding

unfair scoring or overreach.

4. Emotional Clarity Bridge - Converts technical or harsh diagnostics into human-digestible summaries that reduce anxiety or confusion.

5. AI Reputation Loop - Uses human trust ratings (e.g., thumbs up/down, complaint logs) to train AI on which presentation styles earn trust over time.

Method of Operation

When an image or video is submitted to the diagnostic engine, the Trust Stack activates in real time based on user role, declared scope of work, and presentation preferences. The AI determines how to phrase results, which content to emphasize or suppress, and whether the output should reflect a tone of reassurance, alert, or transparency. If the role is 'homeowner,' the system may soften phrasing while retaining critical truth. If the role is 'inspector,' the system emphasizes code violations and accuracy. Trust feedback is logged for future improvement.