Expanded Fields of Endeavor for Patent-Powered AI Technology
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The present invention is recognized as novel and non-obvious by the United States Patent and Trademark Office for its unique combination of technical features, including the use of convolutional neural networks (CNNs) and recurrent neural networks (RNNs) trained on multimodal and/or multiclass training data comprising authenticated data and a taxonomy.

The invention enables the classification, authentication, and verification of data objects within media assets, and supports the generation and display of results—including images, video, text, sound, augmented reality, virtual reality, and mixed reality content—based on secure, verified data sources. Because the Method is based upon verified and authenticated data, the matching process is akin to having an expert in the room who can provide the user with relevant information beyond what a lay person is capable of achieving. The results are more accurate as a result, but the invention goes beyond mere improved accuracy by providing the user with results based on cumulative knowledge in an industry.This technical foundation distinguishes the invention from prior art and provides a robust, legally compliant framework for artificial intelligence and machine learning applications across a wide range of fields.

This list outlines the principal fields of endeavor addressed by the invention, reflecting its broad applicability across industries and technical domains:

1. Automotive
  - Vehicle identification, classification, and provenance tracking
  - Brand heritage, marketing, and design inspiration
  - Autonomous vehicle recognition and V2V/V2I communication

2. Advertising
  - Targeted advertising based on authenticated user interests
  - Media monetization through verified content and brand engagement

3. Insurance
  - Automated verification of assets for claims and risk assessment
  - Fraud detection and historical provenance for underwriting

4. Entertainment
  - Augmented, virtual, and mixed reality experiences
  - Interactive games, film, and storytelling using authenticated data

5. Law Enforcement and Security
  - Identification and authentication of objects in investigations
  - Security checks and provenance verification

6. Travel and Tourism
  - Geolocation-based AR/VR experiences and historical overlays
  - Personalized travel content and cultural heritage tours

7. Classic Cars and Collectibles
  - Authentication and provenance for valuation and restoration
  - Secure, verified trading and collector marketplaces

8. Museums and Archives
  - Cataloging, identification, and presentation of collections

- Digital exhibits and annotation of historical assets

9. Government
  - Documentation, regulatory compliance, and historical preservation
  - Policy research and cultural heritage management

10. Education and Research
  - Academic study and public education using authenticated datasets
  - Interactive learning modules and research tools

11. Toys and Collectibles
  - Authentication and provenance tracking for toy vehicles and collectibles
  - Creation of digital certificates of authenticity and 'car heirlooms'
  - Family storytelling and memory preservation linked to physical and digital play
  - Secure, verified trading and collector engagement

12. Immersive Experiences
  - Geo-linked AR/VR storytelling and virtual travel
  - Integration of family photos, stories, and play into interactive digital experiences
  - Educational and entertainment content creation using authenticated historical data

13. Geolocation and Location-Based Services
  - Real-time location-based data processing and verification
  - Historical location tracking and temporal mapping
  - Location-based authentication and verification systems
  - Integration with physical infrastructure for:
    - Cultural heritage site enhancement
    - Tourism and travel experiences
    - Historical preservation and documentation
    - Location-based content delivery
  - Support for distributed location-based interactions
  - Physical infrastructure verification capabilities

14. Content Licensing and Distribution
  - Licensing of authenticated and verified content assets
  - Distribution of proprietary algorithms and AI models
  - Rights management for:
    - Historical data and imagery
    - Location-based content
    - AR/VR experiences
    - Educational materials
  - Support for content creators and distributors through:
    - Authentication and verification services
    - Rights tracking and management
    - Usage monitoring and reporting
    - Revenue sharing capabilities
  - Integration with existing distribution channels
  - Custom licensing solutions for different market segments

15. Proprietary Data-Driven Software and AI
  - Use of authenticated, verified, and proprietary data—including, but not limited to, financial data, customer data, enterprise records, and proprietary algorithms—as the foundation for artificial intelligence and machine learning model training, deployment, and application

- Expert knowledge system implementation:
    - Novel knowledge graph architecture for processing and verifying industry-specific expertise
    - Immutable, auditable storage of verified expert knowledge
    - Proprietary indexing system for real-time access to cumulative industry knowledge
    - Neural network architecture optimized for expert knowledge matching
    - Semantic analysis engine for context-aware information retrieval
    - Distributed, fault-tolerant database for expert knowledge storage

- Secure, legally compliant, and technically robust framework for:
    - Authenticating and verifying proprietary datasets and software assets
    - Controlling and documenting data provenance and usage in AI/ML systems
    - Preventing unauthorized AI training, model theft, and data leakage
    - Enabling secure, compliant, and trusted AI/ML development and deployment

- Location-aware processing system:
    - Real-time geospatial data processing with sub-millisecond latency
    - Novel spatial indexing algorithm for efficient location-based queries
    - Custom-built geofencing implementation with hardware acceleration
    - Expert knowledge contextualization based on geographic and temporal factors

- Technical implementation details:
    - Proprietary neural network architecture for verification and expert knowledge processing
    - Custom-built GPU acceleration for real-time processing
    - Novel data structure for efficient storage and retrieval of verified information
    - Hardware-level security measures for data protection
    - Expert knowledge verification with real-time validation and quality control

- Applicable to organizations requiring:
    - Real-time data verification and authentication
    - Secure AI/ML model training and deployment
    - High-performance data processing
    - Location-aware computing capabilities
    - Regulatory compliance and audit capabilities
    - Access to verified expert knowledge and industry insights

- Applicable to any organization whose competitive advantage relies on proprietary data and software, regardless of industry

16. Digital Content Licensing and Rights Management
- Platform for independent creators to:
    - Securely manage and monetize their intellectual property
    - Control and track usage rights across multiple platforms
    - Establish verifiable ownership and provenance
    - Enable automated licensing and royalty distribution
- Support for various media types:
    - Photography and visual arts
    - Video content and film
    - Music and audio assets
    - Mixed media and interactive content
- Integration with emerging technologies:

- Blockchain-based rights management
- Smart contracts for automated licensing
- AI-powered content verification and attribution
- Decentralized storage and distribution

This expanded list demonstrates the invention's versatility and foundational role in enabling secure, authenticated, and innovative applications across a wide range of fields.