

1. Automotive Industry

- Real-time vehicle capability assessment

[Page 4, Line 4]: "a user may see an object, such as a vehicle, driving down the road and wonder what it is, or an autonomous vehicle driving on a freeway may have a need to identify objects such as vehicles in its vicinity to learn information"

- Vehicle identification and classification

[Page 22, Line 22]: "In example implementations, a repository of photos, videos, keywords and captions of automobiles of proven provenance, with user narratives and comments, can be used to train a unique AI pipeline to map the information to a target space for image classification"

- Historical vehicle data preservation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information (e.g., images, video, media, text, unstructured data, geographical location data, etc.) about and concerning vehicles"

- Cultural heritage documentation

[Page 8, Line 8]: "There is a need for methods, systems and computer program products that allow a user to identify and search objects such as vehicles, while simultaneously building provenance and preserving knowledge around such objects and their cultural history"

- Vehicle provenance tracking

[Page 8, Line 8]: "to establish automotive provenance based on first-hand historical records"

2. Advertising and Marketing

- Real-time contextual advertising based on vehicle and location data

[Page 6, Line 6]: "The automotive advertising sector is the second largest advertising sector in the overall advertising marketplace"

- Targeted vehicle-specific marketing

[Page 104, Line 104]: "User interest, expressed by uploads of unidentified photos and by time spent reviewing certain vehicle brand archive sections to the media processing system, self-identifies the user's interest in specific vehicle brands and/or segments that can be sought after targets for advertisers"

- Historical vehicle-based advertising

[Page 6, Line 6]: "In 2018, the automotive advertising segment exceeded \$38 trillion, exclusive of advertising for travel and food and automotive repair"

- Location-based promotional content

[Page 106, Line 106]: "Geolocation data, alone or in combination with curated photos of architectural and/or cultural heritage sites, can also be input to the media processing system"

- Brand-specific marketing campaigns

[Page 95, Line 95]: "By virtue of a user uploading an unidentified Alfa Romeo to the platform, the user self-identifies the user's interest in this vehicle brand"

3. Insurance

- Automated verification of assets for claims and risk assessment
[Page 7, Line 7]: "Existing platforms are unable to sufficiently identify vehicles. These platforms can only make inferences from unauthenticated data"
- Fraud detection and historical provenance for underwriting
[Page 8, Line 8]: "to instantly and properly identify objects by training artificial intelligence tools, to preserve cultural history"
- Vehicle condition documentation
[Page 40, Line 40]: "for an image of a vehicle to identify certain features and or parts, which may or may not be associated with a particular design type, time of history and/or cultural trend"
- Historical vehicle data for claims processing
[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"
- Authenticated vehicle information for policy management
[Page 25, Line 25]: "The systems and methods described herein have the benefit of being trained using a proprietary database comprising high-quality, digital copyrighted images of vehicles"

4. Law Enforcement and Security

- Vehicle identification and tracking
[Page 4, Line 4]: "a user may see an object, such as a vehicle, driving down the road and wonder what it is"
- Historical vehicle data for investigations
[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"
- Cultural heritage protection
[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"
- Asset authentication and verification
[Page 79, Line 79]: "According to example implementations, trained SNNs including CNNs may be used for vehicle authentication"
- Historical documentation for legal proceedings
[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

5. Entertainment

- Location-based entertainment content
[Page 107, Line 107]: "Such image data can be used to virtually augment cultural heritage sites or historic places using historic photos including vehicles"
- Real-time interactive experiences
[Page 107, Line 107]: "virtual and/or mixed reality to enhance travel and road trips"

- Geographic context integration
[Page 107, Line 107]: "a user may drive down Route 66 and, using geolocation data, hold up a device (e.g., a cell phone) and see the present location as it evolved through history"
- Historical vehicle-based storytelling
[Page 108, Line 108]: "augmented reality relating to vehicles can be used for cultural heritage tourism to enhance the tourist experience"
- Cultural heritage experiences
[Page 108, Line 108]: "Linking contextual information found in the backgrounds of family photos, provides the groundwork for creating an authenticated augmented"

6. Travel and Tourism

- Location-based travel experiences
[Page 107, Line 107]: "virtual and/or mixed reality to enhance travel and road trips"
- Historical vehicle tourism

[Page 108, Line 108]: "augmented reality relating to vehicles can be used for cultural heritage tourism to enhance the tourist experience"
- Cultural heritage site enhancement
[Page 107, Line 107]: "Such image data can be used to virtually augment cultural heritage sites or historic places using historic photos including vehicles"
- Route-based historical content
[Page 107, Line 107]: "a user may drive down Route 66 and, using geolocation data, hold up a device (e.g., a cell phone) and see the present location as it evolved through history"
- Geographic context integration
[Page 43, Line 43]: "The geolocation data 114 may include longitude, latitude, country, region, historical or cultural place (e.g., Brooklyn Bridge), city, postal/zip code, time zone, way point, cell tower signal, etc. information"

7. Classic Cars

- Vehicle authentication and verification
[Page 79, Line 79]: "According to example implementations, trained SNNs including CNNs may be used for vehicle authentication"
- Historical documentation
[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"
- Cultural heritage preservation
[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"
- Provenance tracking
[Page 8, Line 8]: "to establish automotive provenance based on first-hand historical records"
- Condition assessment

[Page 40, Line 40]: "for an image of a vehicle to identify certain features and or parts, which may or may not be associated with a particular design type, time of history and/or cultural trend"

8. Museums and Archives

- Historical vehicle documentation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Cultural heritage preservation

[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"

- Asset authentication

[Page 79, Line 79]: "According to example implementations, trained SNNs including CNNs may be used for vehicle authentication"

- Digital archive management

[Page 76, Line 76]: "In implementations, a storage or persistence layer may store images, metadata as a multidimensional cube warehouse, ML models, textual narratives, search-indexes, and software/applications underlying a transactional database"

- Historical content curation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

9. Government

- Historical documentation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Cultural heritage preservation

[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"

- Asset authentication

[Page 79, Line 79]: "According to example implementations, trained SNNs including CNNs may be used for vehicle authentication"

- Public record management

[Page 76, Line 76]: "In implementations, a storage or persistence layer may store images, metadata as a multidimensional cube warehouse, ML models, textual narratives, search-indexes, and software/applications underlying a transactional database"

- Historical data preservation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

10. Education and Research

- Historical vehicle documentation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Cultural heritage education

[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"

- Research data preservation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Educational content creation

[Page 8, Line 8]: "to celebrate and educate users about objects (e.g., vehicles)"

- Historical data analysis

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

11. Media and Publishing

- Historical content creation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Cultural heritage documentation

[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"

- Asset authentication

[Page 79, Line 79]: "According to example implementations, trained SNNs including CNNs may be used for vehicle authentication"

- Digital media management

[Page 76, Line 76]: "In implementations, a storage or persistence layer may store images, metadata as a multidimensional cube warehouse, ML models, textual narratives, search-indexes, and software/applications underlying a transactional database"

- Historical data preservation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

12. Technology

- AI/ML model training

[Page 22, Line 22]: "In example implementations, a repository of photos, videos, keywords and captions of automobiles of proven provenance, with user narratives and comments, can be used to train a unique AI pipeline"

- Data processing and analysis

[Page 44, Line 44]: "The CNN 120 may be employed to process the image data 110, the video data 112, the geolocation data 114 and the structured input data 116 to produce an image classification result 130 and/or a virtual display result 132"

- Digital asset management

[Page 76, Line 76]: "In implementations, a storage or persistence layer may store images, metadata as a multidimensional cube warehouse, ML models, textual narratives, search-indexes, and software/applications underlying a transactional database"

- Historical data preservation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Cultural heritage digitization

[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"

13. Cultural Heritage

- Historical documentation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Asset authentication

[Page 79, Line 79]: "According to example implementations, trained SNNs including CNNs may be used for vehicle authentication"

- Cultural preservation

[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"

- Historical data management

[Page 76, Line 76]: "In implementations, a storage or persistence layer may store images, metadata as a multidimensional cube warehouse, ML models, textual narratives, search-indexes, and software/applications underlying a transactional database"

- Heritage site documentation

[Page 107, Line 107]: "Such image data can be used to virtually augment cultural heritage sites or historic places using historic photos including vehicles"

14. Transportation

- Vehicle identification

[Page 4, Line 4]: "a user may see an object, such as a vehicle, driving down the road and wonder what it is"

- Historical documentation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Asset authentication

[Page 79, Line 79]: "According to example implementations, trained SNNs including CNNs may be used for vehicle authentication"

- Transportation history

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Vehicle tracking

[Page 24, Line 24]: "If the infrastructure is equipped with methods and systems as described herein, it may time or adjust the traffic lights to enhance platooning of V2I vehicles"

15. Proprietary Data-Driven Software and AI Method

- Use of authenticated, verified, and proprietary data

[Page 45, Line 45]: "The CNN 120 and the RNN 122 may be pre-trained using a comprehensive and precise training data set 140 that comprises inter alia non-published data, published data, images, videos, text"

- Secure, legally compliant framework

[Page 57, Line 57]: "In implementations, the authenticated data may include copyright registered works of authorship including, but not limited to, copyrighted images, videos, text, stories, sketches, etc."

- Applicable to any organization

[Page 20, Line 20]: "Thus, the systems and methods described herein may be applied to a wide variety of physical objects that may involve various combinations"

- Location-based data processing

[Page 43, Line 43]: "The geolocation data 114 may include longitude, latitude, country, region, historical or cultural place (e.g., Brooklyn Bridge), city, postal/zip code, time zone, way point, cell tower signal, etc. information"

- Geographic context integration

[Page 44, Line 44]: "The CNN 120 may be employed to process the image data 110, the video data 112, the geolocation data 114 and the structured input data 116"

- Real-time location-aware AI applications

[Page 24, Line 24]: "If the infrastructure is equipped with methods and systems as described herein, it may time or adjust the traffic lights to enhance platooning of V2I vehicles"

16. Toys and Collectibles

- Historical vehicle documentation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Cultural heritage preservation

[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"

- Asset authentication

[Page 79, Line 79]: "According to example implementations, trained SNNs including CNNs may be used for vehicle authentication"

- Collectible verification

[Page 40, Line 40]: "for an image of a vehicle to identify certain features and or parts, which may or may not be associated with a particular design type, time of history and/or cultural trend"

- Historical data preservation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

17. Real Estate

- Historical property documentation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Cultural heritage preservation

[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"

- Asset authentication

[Page 79, Line 79]: "According to example implementations, trained SNNs including CNNs may be used for vehicle authentication"

- Property history tracking

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Historical data preservation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

18. Fashion and Design

- Historical vehicle documentation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Cultural heritage preservation

[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"

- Asset authentication

[Page 79, Line 79]: "According to example implementations, trained SNNs including CNNs may be used for vehicle authentication"

- Design history tracking

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Historical data preservation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

19. Sports and Recreation

- Historical vehicle documentation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Cultural heritage preservation

[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"

- Asset authentication

[Page 79, Line 79]: "According to example implementations, trained SNNs including CNNs may be used for vehicle authentication"

- Sports history tracking

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Historical data preservation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

20. Healthcare

- Historical vehicle documentation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Cultural heritage preservation

[Page 8, Line 8]: "while simultaneously building provenance and preserving knowledge around such objects and their cultural history"

- Asset authentication

[Page 79, Line 79]: "According to example implementations, trained SNNs including CNNs may be used for vehicle authentication"

- Medical history tracking

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"

- Historical data preservation

[Page 98, Line 98]: "Implementations described herein provide for the preservation and accessibility of collated, correlated and curated historical information"