

Virtual assistant for simple and fast components identification

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Background and Expertise

- Novorizon GmbH:
 - Grounded in 2018, located in Stuttgart, Germany
 - Part of the Wiretronic AB group since March 2023
 - Over 20 years of expertise in vehicle diagnostics and physical measurement in the Automotive industry (Bosch, Delphi, Facom...)
- We offer a unique product portfolio of innovative solutions for a daily improved efficiency – everything about the vehicle harness!
 - Design, prototyping and small volume production
 - Diagnostics and remote fault localization
 - Test and measurement
 - Servicing and repair
- We also offer AI-based computer-vision solutions to support automotive workshops daily activity
 - Spare parts identification
 - OCR-based applications

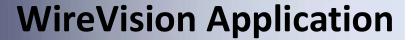














Parts search and identification issues:









- > Enabling important decreased in customer support time and cost
- > Need to simplify processes, to reduce errors and to increase loyalty







Our solution:

- WireVision white label patented computer-vision assistant based on an Artificial Intelligence engine
- Spare part identification in a matter of seconds
- Part details, tooling, required, methodology, warnings ...
- Smartphone-based application for a maximal portability in all circumstances
- Flexibility can be adapted to any vehicle component & system







WireVision Application

Step by step support:

- Component image acquisition
- Applying machine vision ID process to determine the type and part number of the component
- Display specific repair tools and instructions to perform a professional repair
- Including parts location in spare sets wherever applicable
- Can be bridged into own ERP (spare parts ordering, proprietary tech data...)

















Natural add-on to the WireVision virtual assistant

- → 3-D modelisation of your components, rotational 360°
- Part of our Artificial Intelligence engine training process
- Ideal for on-line parts catalogues, repair manuals and instructions, technical documentation...
- Available to various standards to match your needs
- On-line demonstrator available: https://rotate.wiretronic.ai

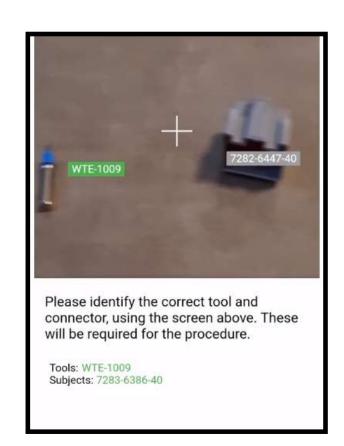






Combining computer-vision to Augmented Reality

- Real-time objects / behaviour / operations monitoring
- Augmented-reality information overlayed to guide the technician step by step and reduce the error risk
- The right tool (in green) can for instance be associated to the right spare part in real-time
- Critical steps can be validated one after the next
- On-line demonstrator available:
 https://wirevision.blob.core.windows.net/wt-static/app promotion media/wiretronic-ai-media/WireInstruction.mp4









OCR-based solutions

- VIN, registration plates scan in order to speed-up the workshop processes and limit the error risk
- Advanced OCR solutions:
 - Technical plates / registration documents scan
 - Retrieval of all information field
 - Transmission to an online .html page, ready for customer IT system to collect and exploit as required
- > Tailor-made solutions to customer requirements
- On-line demonstrator available:
 https://wirevision.blob.core.windows.net/wt-static/app promotion media/vin-scanner/vin-scandemo.webm









Object Detection and Instructions (ODI)

Inspection

 e.g. validate that an inspection has been correctly made and store the results.



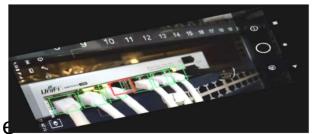
 e.g. keeping track of tools location in a warehouse and track present and missing parts

Inventory:

 e.g. inventorying and spotting missing items among a product composition to facilitate the ordering process

Diagnostics:

 e.g. combine fault-codes with computer-vision data model to validate fault physical location

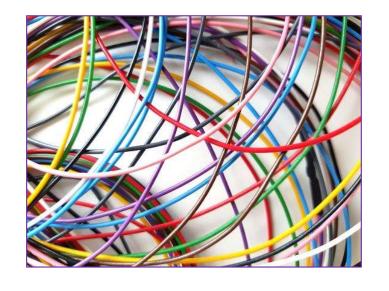












Thank you for your participation and interest

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