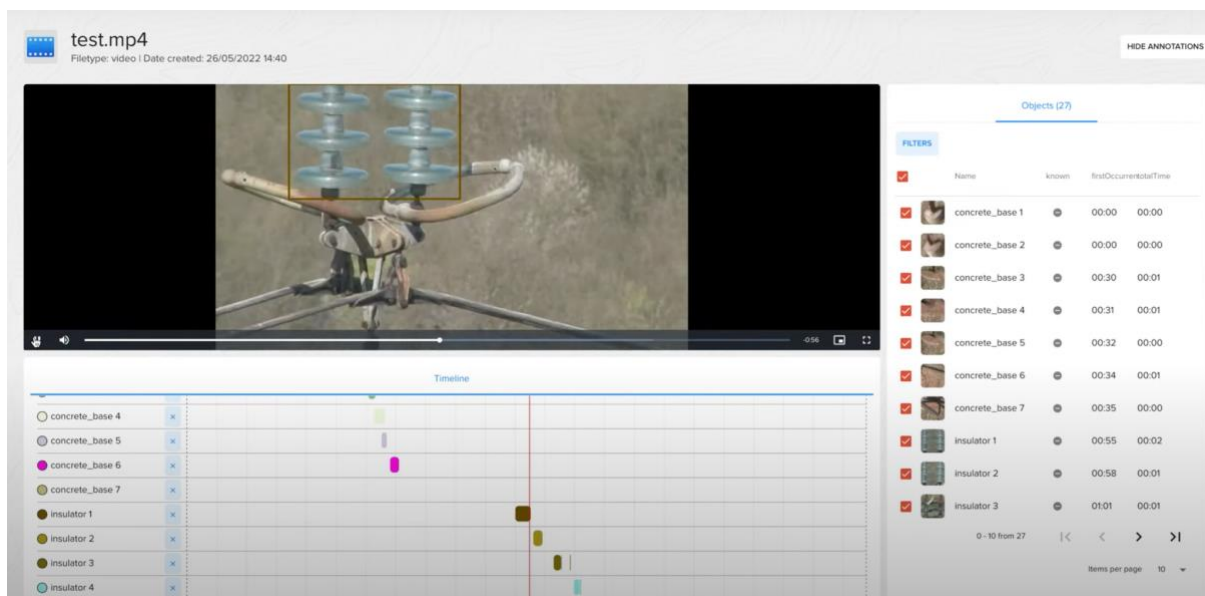




The mission of the ELECTRA solution is to streamline and improve the inspection process of electrical power transmission systems, enable early identification of potential problems, and thus prevent possible outages or more serious malfunctions.

ELECTRA is Cogniware's software platform for energy companies that uses artificial intelligence (AI) to identify damage and anomalies in electrical power transmission systems and their components. Early, fast, and above all, objective identification of damages and defects is a critical factor in ensuring the continuity of operation of the electrical transmission system and, last but not least, in minimizing increased maintenance costs by taking timely measures.



Objects¹ identified in the video

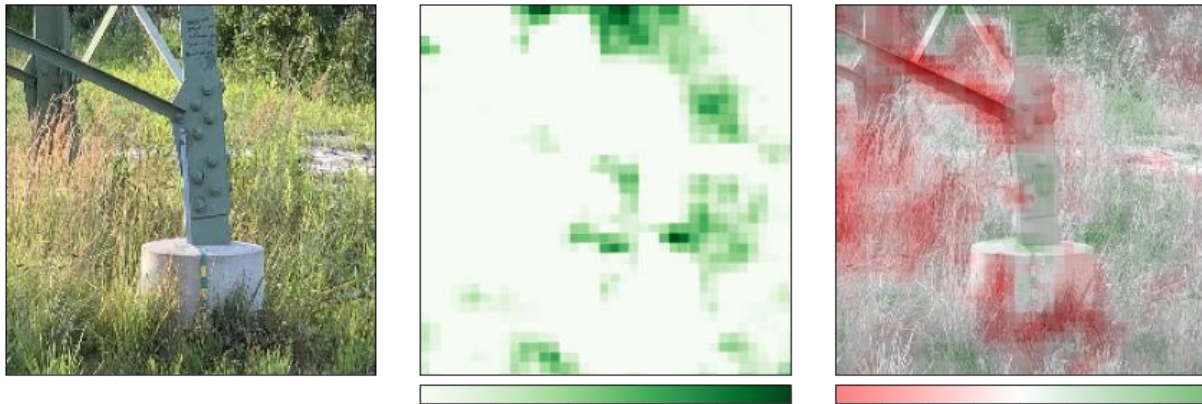
ELECTRA significantly streamlines and automates the process of identifying and categorizing damages through advanced analysis of video footage or photos captured by helicopters, drones, or field maintenance personnel.

It automatically goes through the content of videos or photos and uses artificial intelligence (AI) to identify individual objects. These are insulators, support points, conductors, conductor protection, feet of support points, etc. The identified objects are subsequently automatically assessed from the point of view of possible damage.

¹ ELECTRA is an open platform, so additional or new AI modules for object damage detection can be developed and added as part of the platform according to the customer's needs.

The artificial intelligence of the ELECTRA system is trained to assess the state of objects according to their damage and therefore provides a strictly objective view of the state of damage to elements of the electrical transmission system.

The result is a detailed list of identified objects with information on their damage status.



An artificial intelligence (AI) view of the damaged pillar

Digitization of the process of inspection of the condition of electrical transmission system elements using the ELECTRA system can save a large amount of time and decrease costs by preventing more serious damage to the electrification transmission system.

ELECTRA can be used not only for electric transmission system objects but also is possible to identify extraneous objects in the protection zone of the system. For example, illegal construction or vegetation threatening the operation.

Cogniware, your partner in AI projects

Cogniware can be your partner in projects using artificial intelligence or machine learning.

Cogniware has its own international AI Research and Development (R&D) team, which is able to solve specific tasks according to your assignment. Thanks to the rich experience of our AI R&D team from projects all over the world, we are able to meet the specific requirements of our customers. It can be, for example, about

- detection of events in defined perimeters - it is possible to control the movement of external suppliers near the device,
- compliance with safety regulations and standards during repairs,
- visual detection of special events - for example, flashes or sparks at substations during storms or overloads,
- etc.

Contact:



Cogniware, s.r.o.
Pernerova 697/35, Karlín
186 00 Prague 8
Czech Republic

argos-electra@cogniware.com

