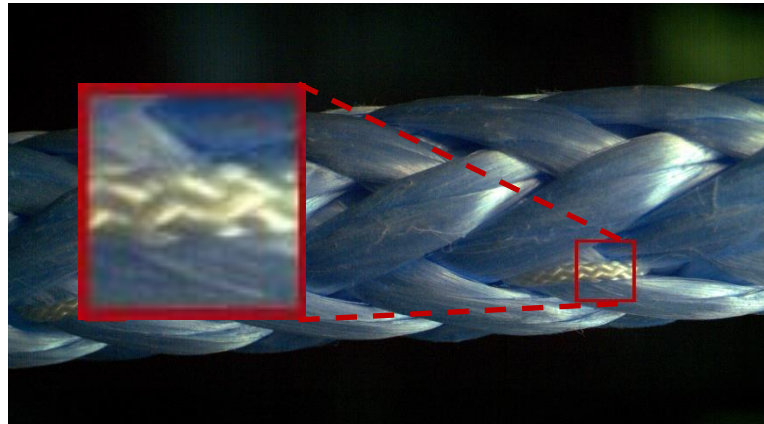


Introducing FlawView: Affordable Flaw Detection from Imagery

In this report, we introduce FlawView solutions, which make automatic visual inspection affordably effective. In a recent case study, we analyzed a well-known, publicly available dataset that includes thousands of rope inspection snapshots.* Most snapshots showed no visible flaws. Some snapshots showed flaws like the one pictured below. We configured FlawView to produce alerts that highlight flaws as shown. We quickly configured FlawView using a training sample made up of only 28 images. Based on test sample results, the flawed image detection rate was over 84%, coupled with a normal image exclusion rate over 75%. Results showed that FlawView, based on edge machine learning, can run images as shown on low-end or embedded processors at real-time rates.



These results show how FlawView can complement deep learning AI, as follows:

- Enhanced Interpretability. Inspectors can readily interpret FlawView output.
- Time and Cost Efficiency. FlawView "triages" rarely occurring flaws while suppressing false alerts, saving inspectors time and money.
- Self-Sufficiency. Inspectors can run FlawView on low-end processors without relying on cloud-based services and advanced deep-learning tools.
- Training Simplicity. FlawView can be quickly trained with small sample sizes, unlike alternatives that require large samples and powerful processors.
- Maintenance affordability. Inspectors can re-tune FlawView models more affordably than deep learning alternatives.
- Inspection security. FlawView does not require third-party deep learning services, allowing inspectors to keep their data and methods to themselves.

We look forward to discussing how FlawView can affordably improve your inspection capabilities. Feel free to [contact us](#).

* The dataset for this report was kindly provided and described in an article entitled, "Imagery Dataset for Condition Monitoring of Synthetic Fibre Ropes," by Anju Rani, *et. al.* For a full article citation, dataset description, and downloading details, please open [this link](#).