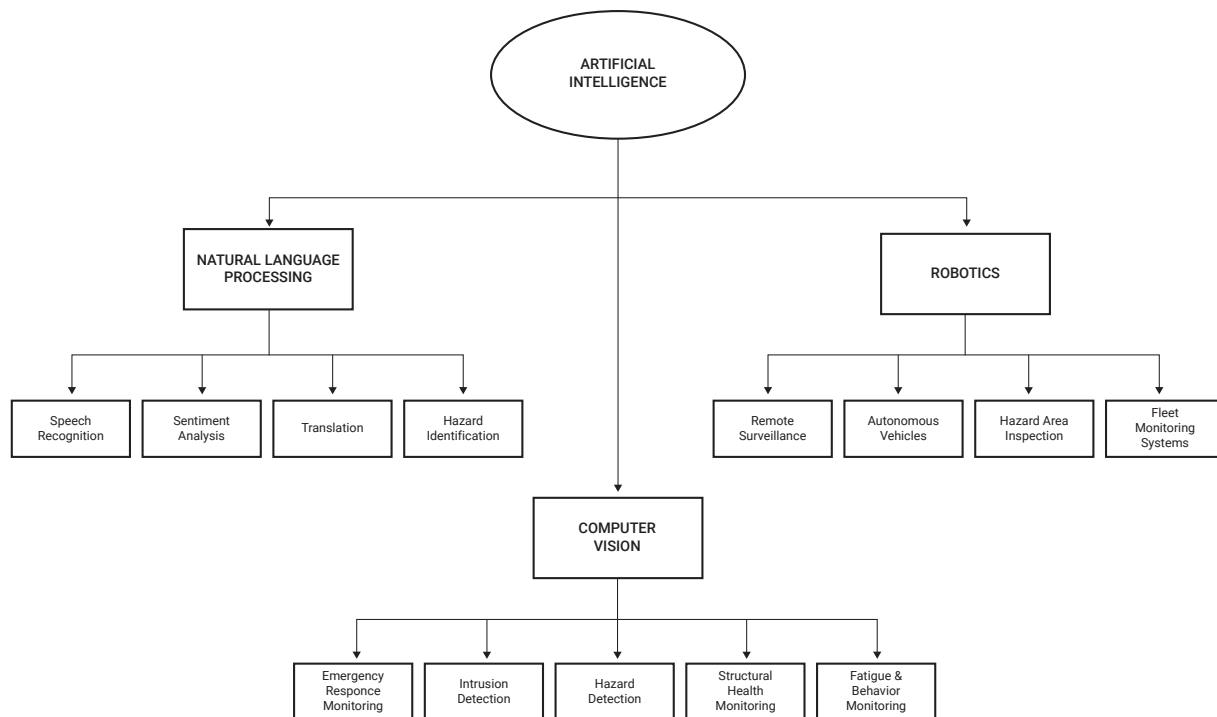


WHAT IS ARTIFICIAL INTELLIGENCE (AI), AND HOW DO WE USE IT?

ENHANCING OPERATIONAL SAFETY WITH PREDICTIVE AI TECHNOLOGIES

Artificial Intelligence refers to a set of technologies that perform tasks requiring human intelligence, such as language understanding, decision-making, and reasoning. It includes techniques like natural language processing (NLP) (e.g., speech recognition, translation), robotics, and computer vision (image recognition). Insight Risk Systems uses AI methods across many industries, such as construction, oil & gas, and railways, to squeeze insights from reams of already-collected data. This equips us to improve safety performance by moving beyond reactive approaches to more predictive and preventive strategies.

AI can perform various tasks to improve safety at the operations level, including real-time monitoring operations to detect risks and equipment health, and automating emergency responses. Solutions like these can enable companies to enhance safety performance, build resilience, reduce equipment downtime, and optimize resource allocation.



Using our expertise in risk, strategy, and machine learning; decades of operational, regulatory, and research experience in energy, mining, construction, and transportation with serious incidents and fatalities, we:

- Insightfully combine advanced data analytics and machine learning, process safety and risk management methods, and strategy and human factors analysis.
- Leverage data fusion techniques to analyze your existing data from various sources – inspections, incidents, operational performance, employee surveys – and use theory-informed machine learning methods to ‘see’ missing leading indicators (the weak signals) to help you understand and improve your risk management systems.
- Currently we offer these as a service, but can help automate data cleaning, analysis, data-fusion, and visualization processing pipelines, so that these can be offered as a product and bundled with MS Power BI or ERP software.

To discuss how you can analyse the gaps in your company’s risk management system, contact us:

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