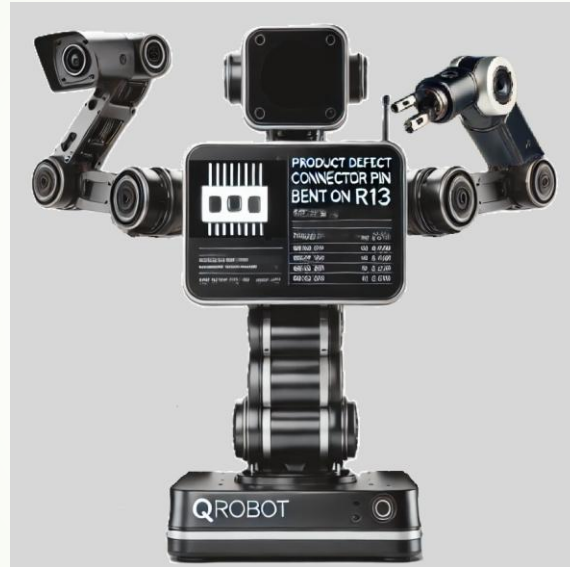


# QRobot

-- Equip robots for quality



Companies: Risk driven Quality Consulting Company LLC (RdQCC)

Global Risk Data Inc (GRD)

Founder: Jerry (JinXing) Xiao

Dec 10<sup>th</sup>, 2024



# Who we are

- Decades of Experience in Product Failures & Risk

investigate more than 200,000 product failure issues and conducted risk analysis across over 100 product categories including robotic surgery and AI-powered medical devices.

- First AI-powered Risk Analysis for Product Defects

develop innovative platforms, [www.risk-discovery.com](http://www.risk-discovery.com), [www.risk-chat.com](http://www.risk-chat.com), utilized by over 3000 users globally.

- First AI-Powered Robot for Quality Using LLM

Developed extensive proprietary datasets, including Text-RiskNet and Image-RiskNet, featuring over 13,000 unique failure modes with comprehensive risk analysis. Fine-tuned advanced AI Models leveraging large language models (LLM) to mitigate defects at their root causes and support risk-based decision-making.

- Academic Collaboration

establish a partnership with Concordia University (ranked #2 in AI research) through the NSERC (natural sciences and engineering research council of Canada) grant program.

# What problems are

- High Volume Product Recalls and impacted Units in USA (2023)

for consumer products, 322 recall events, impacting approximately 135.2 million units;  
for medical devices, 975 recall events, affecting 283,44 million units (*source: PR Newswire*)

- Serious Product-related Incidents in USA (2023)

approximately 12.7 million individuals were treated in emergency departments for injuries and over 700 deaths due to consumer product incidents (*Source: Stein Whatley*)

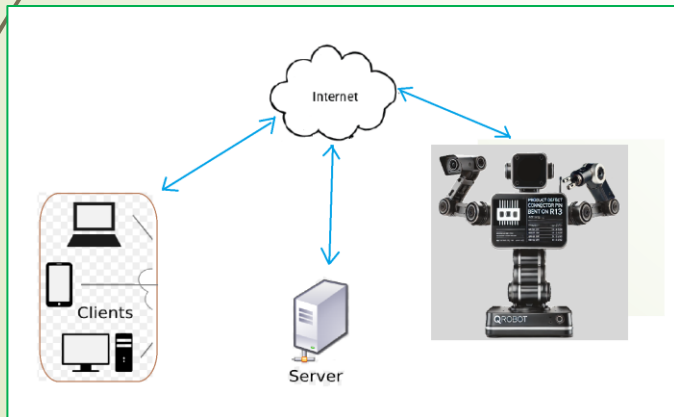
The FDA receives over two million reports annually of suspected device-associated deaths, injuries, and malfunctions. From July 1 to September 30, 2023, FDA received over 7,000 reports related to Philips ventilators including 111 patient deaths. (*Source: Fierce Biotech*)

- High Product Inspection Costs and Investment

The cost of quality consists of prevention, appraisal, and failure costs, accounts for up to 25% of sales for some firms and can reach 40% to 50% in certain cases.

Most automated inspection systems are based on measurement approach and limited to isolated checkpoints, unable to identify defects out of these checkpoints. A mid-level systems typically range from \$50,000 to \$150,000. Those systems are limited to a few checkpoints and are often unaffordable for small manufacturing companies or those with low-volume production needs.

# What Our Solutions Are



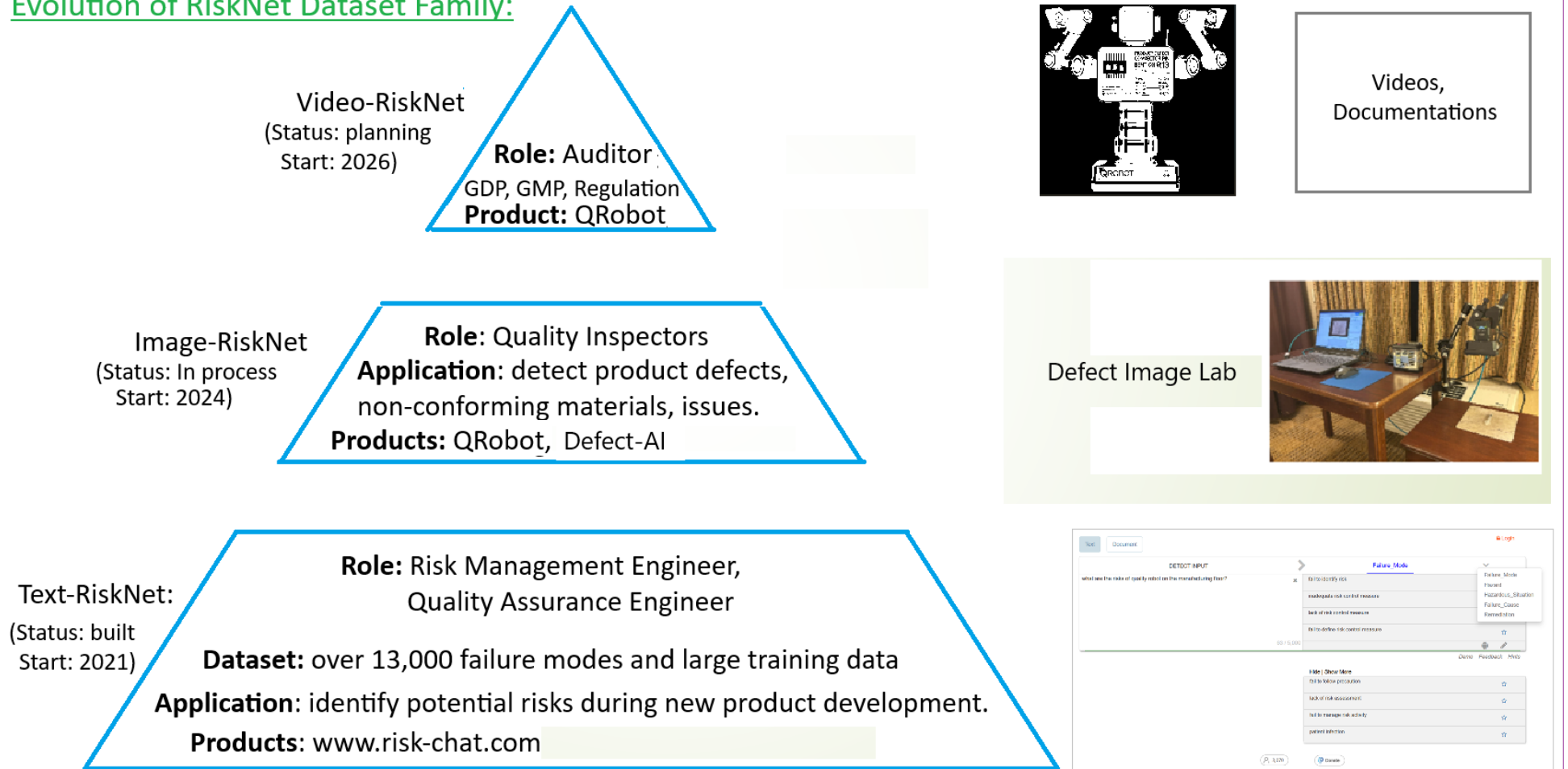
The **QRobot** system minimizes quality inspection costs (as low as \$0.6/hour) and investment through a subscription model. It seamlessly and consistently detects product defects and non-conformance issues across production floors, enabling risk-based decision making for defect disposition, leveraging proprietary AI models and advanced robotic technologies.

- **Maximum Efficiency at Minimum Cost**
- **One QRobot for All**  
detect a wide range of defect scales and types.
- **Custom AI Bimodal Models**  
built on proprietary Image-RiskNet datasets to identify product defects efficiently and accurately.
- **Detailed Risk Analysis**  
deliver failure modes, hazard, hazard situation, failure causes, risk level, risk mitigations, risk-based decision making.



# QRobot Core: RiskNet Dataset and Its AI Models

## Evolution of RiskNet Dataset Family:



# How we compete with others

Criteria	QRobot	Traditional Automated Inspection Systems	Manual Inspection
Cost	\$1,000/month subscription (\$0.6/hour)	\$100,000 upfront investment	High labor costs (\$20/hour)
Deployment Flexibility	Inspect all sides of a product and across production lines	Limited to specific side of a product and production line	Flexible but slow
Accuracy	Powered by proprietary AI models for superior defect detection and risk-based decision making	Fixed accuracy and no capability for risk analysis	Inconsistent and no capability for risk analysis
Scalability	Easily scalable via RaaS	Requires significant reinvestment	Difficult to scale
Ease of Use	Intuitive setup and operation	Requires technical expertise	Moderate

**Summary:** QRobot offers a cost-effective, scalable, and highly accurate solution compared to traditional automated inspection systems and manual inspection methods. It utilizes advanced AI-driven robotic technologies, comprehensive product risk analysis, and a flexible Robots-as-a-Service (RaaS) model, making it accessible to business of all sizes.

# Why we are Qualified to VC

- **Experienced Leadership:** A team with a proven track in AI, robotics, risk management, quality control, operations, and global supply chain.
- **Innovative Technology:** Leveraging proprietary AI models and advanced robotic technologies to revolutionize quality inspection for the next generation.
- **Traction:** Since 2021, proprietary AI text models have achieved global user adoption. In 2024, a Defect Image Center was established to continuously product high-quality defect images with captioned risk analysis. In 2025, The QRobot hardware partner was finalized and the first demo, integrated with our AI-models, is scheduled for May 2025.
- **Strategic Partnerships:** Establish a partnership with Concordia University (ranking second in Canada for AI-related publications) through the NSERC (Natural Sciences and Engineering Research Council of Canada) grant program.
- **Market Insights and Scalability:** Deep understanding of the manufacturing sector's challenges, providing a cost-effective and scalable inspection solution through QRobot.

# Thank you – Partner with Us to Transform Quality Inspection



- Revolutionizing Quality Control by transitioning to full integrated production lines.
- Proven risk reasoning engines and proprietary AI bimodal models with strong initial traction.
- Addressing a \$13B+ TAM with a scalable subscription model.
- Contact Information:

Jerry Xiao, CEO & founder

Email: [jxiao@rdpdm.com](mailto:jxiao@rdpdm.com) | Phone: +1 (515) 657-2476

Website: [www.rdqcc.com](http://www.rdqcc.com)

*Let's shape the future of quality control together.  
Schedule a follow-up meeting to discuss investment opportunities.*

