RZ Ecosystem Partner Solution

NEXT-SYSTEM VisionPose®
Anomaly Detection System

Solution Summary
An anomaly detection system in a specific area with alert, based on “VisionPose” which is an original AI-Engine of Pose Estimation developed by NEXT-SYSTEM. It can recognize human body parts, and it is suitable for childcare & nursing-care. Deliver unique Pose Estimation technology with low power efficiency by using DRP-AI of RZ/V series.

Features/Benefits

• Easy to handle by ‘Markerless-type’
  • Able to detect solo working by video signal from camera without any wearable device
• Anomaly detection in a specific area recognizing each part of a human body
  • Judgement by skeletal frame information, able to recognize each parts individually
• Real-time detection
  • Support real-time AI inference to get skeletal frame information
• Implementable to Edge-device
  • Embed this AI-Engine to AI camera and other edge-device for rapid operation
• Support Network camera (IP-camera)
  • Compatible with network (IP) cameras and able to monitor the congestion status in stores and monitor security.

Graphics

Target Markets and Applications

• Childcare
• Accident prevention for hospital, nursing facility
• Safety measure in work site

https://www.next-system.com/en/visionpose
Corporate profile

<table>
<thead>
<tr>
<th>Company name</th>
<th>NEXT-SYSTEM Co., Ltd.</th>
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</thead>
<tbody>
<tr>
<td>HQ location</td>
<td>Fukuoka Head Office</td>
</tr>
<tr>
<td></td>
<td>2F, 3-12-33 Ijiri, Minami-ku, Fukuoka City, Fukuoka, 811-1302, Japan</td>
</tr>
<tr>
<td>Established</td>
<td>August 28, 2002</td>
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<tr>
<td>President &amp; CEO</td>
<td>Yoshio Fujita</td>
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<tr>
<td>Business Activities</td>
<td>Develop and sales of ‘VisionPose’ as AI Engine of Pose estimation Behavior analysis by using AI, R&amp;D of Ergonomics system R&amp;D of leading edge technology (AR/VR/XR)</td>
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<td>Common stock</td>
<td>80,750,000 Yen (including 28,125,000 Yen as capital reserve)</td>
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<td>Sales amount</td>
<td>420,856,506 Yen (FY2020)</td>
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<tr>
<td>Number of Employees</td>
<td>50</td>
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Key products to utilize AI-camera (IP-camera)

**Dangerous behavior detection system in a specific area**

When someone penetrates into a specific area, this system can raise an alert to prevent accident.

**Behavior detection system in a specific area**

When the particular action is detected in a specific area, this system can raise an alert. In the case of above photo, it detects presence or absence of antisepsis and indicates the status.

**Optical flow**

(The spectrum map of moving speed for target objects)

Measuring the moving speed and distribution of target objects (e.g. speed, traffic condition, flow line), visualizes them, and displays alerts.