การพัฒนาอุปกรณ์และระบบตรวจสอบหมุดยึดรางรถไฟโดยแมชชีนวิชชั่น

Development of real-time machine vision for rail fastener inspection

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Collaborative agency	Bangkok Expressway and Metro Public Company Limited
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Rail and fastener play an importance role on safety in rail transportation. If rail or fastener have any defect or imperfection, this could significantly increase risk of accidents, causing loss of lives and property. Therefore, it is mandatory to monitor these devices regularly and in a timely manner. At present, inspection of rail and rail fastener in Thailand relies on human inspection, depending on each person's experience. Besides, process is time-consuming and backbreaking which can cause an error in inspection process. This project has developed an automated rail and rail fastener inspection system using machine vision and imaging processing, able to inspect rail and fastener while train is in service and identify defects or any imperfection together with their positions.

ศูนย์วิจัยเทคโนโลยีระบบรางและการขนส่งสมัยใหม่