Scaling Machine Vision: From Afar to Up Close

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Machine vision can be applied to various targets, such as locating the puck and players on the rink, and on the other hand, analyzing defects on shiny surfaces using deflectometry. This has also been done, and now the scale has been completely changed - in PIC chip testing devices, a micrometer is already a large distance.

So, my idea in that presentation is to first explain how we looked at things from a distance and used NIR lights, then looked at them closer and the size of the target decreased as we had to find defects smaller than a millimeter on shiny surfaces. We needed to find the right combination of lights and cameras to create a device that was commercially viable in terms of price. Now, once again, a super-precise testing device is being made, where we are at the chip level. The circle will likely close for NIR lights, although the scale is new. We are, in any case, in an area that is new.

Company, Wisematic Oy - industrial automation on a wide scale for 20 years, specializing mainly in small and very small parts with solid experience in industrial quality. We seamlessly integrate machine vision and sensing into comprehensive solutions tailored to our customers' needs.

Mika-Petteri Kuro - https://www.linkedin.com/in/mpwkuro/ has 20 years of experience in customer interface and nearly 15 years in machine vision applications. Currently the Commercial Director at Wisematic and previously the CEO of Helmee Imaging Oy.