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Computer supported collaborative work using wearable and augmented reality technologies

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In this talk, I will provide an overview of the work conducted within my research team at CISRO in the area of Computer supported collaborative work using wearable and augmented reality technologies. The work draws on industry needs and technology drivers to design deploy and evaluate innovative remote collaboration solutions for the mining industry. In this talk I will present ReMoTe, a platform for remote mobile tele assistance to support the changing role of mining operators. This work is about enhancing and augmenting mining operators in order to improving productivity in mines by reducing equipment downtime while enhancing operator skills set. I will also present the remote mining engineer platform designed to allow mining engineers to remotely deliver their services to mine sites. I will present the outcomes derived from trialling ReMoTe technology at a mine site in South of Australia as well as in one of Boeing manufacturing sites in Seattle. As a result of the successful trial, Boeing is undertaking to use ReMoTe for its maintenance and training operations. We won the 2013 NSW State innovation Awards in research and development for our ReMoTe platform.

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Industrial robotics in Latin America

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The use of industrial robots as a key element within an automated process is now the norm in the industrial environment across the world but despite this there are still some countries where this is not currently the case. The presentation looks at the South American market where with the exception of Brazil there are very few robots currently being deployed. What is the current robot exposure in these countries and how will this market evolve over the coming years. The countries considered for this presentation are: Guatemala, Belize, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Columbia, Venezuela, Ecuador, Peru, Chile, Argentina, Bolivia, Paraguay and Uruguay. Phoenix Control Systems Ltd. has had a lot of success introducing small robotic production cells around the world across many disciplines and is now looking very actively at this Latin American market. We have recently opened offices in Mexico to facilitate expansion into this new area. Looking at the figures for robot usage in these countries we see that in 2013 we have a mere 251 robots shipped collectively across these countries against 1,400 for Brazil alone and 30,000 over the rest of the American continent! The overall robot stock is even more telling with a low key 1900 robots collectively against 8,500 for Brazil and 240,000 over the rest of the American continent. The presentation will take a look at which of these countries has had success in introducing robots into their automated processes and what are the particular disciplines where they have been used. The presentation will also look at what the main robot manufacturers are doing to increase robot usage and sales in these particular countries.

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