**Is a Robot Apocalypse Immanent?**

Concerns over what technological innovation does to work, jobs, wages, and living date back at least as far as the Industrial revolution. Every new wave technological innovation brings with it a swell of concern about consequential mass displacement of labour, and yet the reality is that jobs and wealth have shown steady growth since the 1850s. A crucial distinction in what is happening now around the rise of robotic and automation technology and the great break-throughs of earlier ages lies in the rate at which change is happening. Human labour is being systemically devalued by emerging technologies that is capable of replacing it at lower cost and at a pace that is faster than anything previously experienced. It is pertinent to ask: how we should position to best benefit from this? The mining industry is taking some bold steps in automation likely to radically transform the labour profile over the next decade. What happens in mining may be a harbinger of change across other sectors.

In this talk I will use this talk to review the current state of mining automation and the broader consequences of the technology to the mining industry. I will address some relevant questions: What is the state of play? What research questions need address and what will it take to solve them? What does the change mean to the industry? And what opportunities exist for broader national benefit?