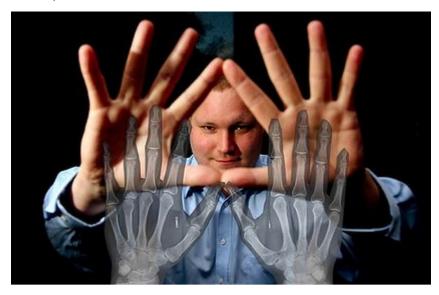
The key to the future lies in this man's hands CONRAD WALTERS June 5, 2010



Mr Chips ... Amal Graafstra has programmed the locks in his life, such as those on his house, to recognise the radio frequency identification chips implanted in the webbing of his hands. Photo: Ben Rushton

A small microchip is blurring the line between humans and technology, writes Conrad Walters.

WHEN Amal Graafstra wants to check email, he signs on to his computer with a flick of the wrist. Inside the webbing between his thumb and forefinger, a microchip

the size of a grain of rice verifies his identity through an electronic reader and unlocks the PC.

The IT expert can unlock his car or start his motorcycle the same way. But the "killer app" comes into play when he returns from work, perhaps with groceries in each hand. "As soon as I stand by the door, I can just nudge my hand against the reader panel, which is right by the doorknob, and it unlocks," he says. No fumbling or juggling, no aiming a key in the dark. He simply walks in.

Mr Graafstra is among a small number of hobbyists - estimated to be fewer than 300 worldwide - who have radio frequency identification (RFID) chips implanted in their bodies.

Mr Graafstra, who lives in the US state of Washington, is in Australia to discuss his experience as part of a three-day conference at the University of Wollongong next week exploring the relationship between humans and technology.

RFID chips gained widespread acceptance in the 1990s when they were first used to identify pets. But in 2005 Mr Graafstra applied the technology to himself so he could stop carrying keys for work and home. He underwent a five-minute procedure by a cosmetic surgeon to become microchipped and then programmed the locks in his life to recognise his chip.

He has been a lightning rod for how others respond to the idea of microchipping humans. Some see his action as ingenious; others see conspiracies and cite the Book of Revelations. Early on, unsolicited publicity for his work prompted an email that said: "You are the devil's mouthpiece."

But Mr Graafstra is no proselytiser for microchip implants. He believes biometrics - iris scans, voice patterns, even the way people walk - will prove superior for verifying identity.

What interests him is creating a dialogue on technology and its uses, which is why he will be at the International Symposium on Technology and Society.

The conference organiser, Katina Michael, an associate professor in the school of information systems and technology at Wollongong, predicts RFID technology - implanted or worn - will become part of daily life.