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Implanting the Future at your Fingertips: The Epitome of Advancements in Bio Wearables

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Implanting the Future at your Fingertips

The Epitome of Advancements in Bio Wearables

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One of the beauties of the Taylor Series, a series expansion of a function, we all learn in a calculus II class is that it lets us transform almost all abstract functions into polynomial functions. However, one of the unique functions the Taylor Series cannot estimate is the absolute value function. This is because the derivative of the point that changes its slope does not exist; in other words, it's unpredictable. The field of technology is like the absolute value function. Every time it seems like humanity has reached its peak technological advancement, it seems to find a way around it to impress the world with a new invention that changes our lives at a fundamental level. For example, the iPhone changed our lives, but as the iPhone series advanced the designs started to be bland, and every upgraded version was more or less the same. Then, right when we started to doubt the future advancements of technology, artificial intelligence began to disrupt society and force change, adaptation, and integration into our lives. One such intriguing development in a relatively small, niche community is the emergence of individuals who call themselves "cyborgs."

These "cyborgs" are people who have voluntarily implanted small microchips or magnets into their bodies for various purposes. One of the most common implants is an Radio Frequency Identification (RFID) chip injected into the skin between the thumb and index finger. One of the most significant advantages of RFID chip implantation is its convenience. By having these chips embedded in their bodies, cyborgs can easily access their homes, cars, or workplaces without needing keys or access cards. Implanting RFID chips can enhance personal security by replacing traditional access methods, such as keys or cards, which can be easily lost or stolen. Since these chips are embedded within the body, unauthorized access becomes exceedingly difficult.

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Additionally, the chips can be programmed to require biometric authentication, such as a fingerprint or retinal scan, adding another layer of security. The chips can make payments, store personal data, and even exchange contact information with others through a simple hand gesture. RFID chips can also be utilized for medical purposes, improving medical applications. For instance, they can store vital medical information, such as allergies, blood type, and emergency contact details, which healthcare professionals can easily access in an emergency. This capability can significantly improve the speed and accuracy of medical treatment in critical situations. Although the cyborg community is tiny, the implantation of the chip is as easy as a simple injection. It can be even done with premade Do-It-Yourself packages at home.

However, there are also concerns surrounding RFID chip implantation, with one of the primary issues being the potential invasion of privacy. As these chips can store and transmit personal data, there is a risk of unauthorized access or misuse. Furthermore, the potential for tracking and surveillance raises ethical concerns regarding individual autonomy and privacy rights. The long-term health risks associated with RFID chip implantation are not yet fully understood, including the prolonged exposure to electromagnetic radiation, which has stirred controversy for quite some time. Although the chips are typically encased in biocompatible materials, there is still a possibility of infection, rejection, or even migration of the chip within the body. This fatal flaw is especially important when one considers that the implantation process of the chip is much easier than removing the chip, which requires surgical procedures.

Implantations are one of many ways people could become cyborgs. A new method that tattoos digital imprints on the skin is also gaining traction in the scientific community. Additionally, digital tattoos, which embed electronic components and sensors directly onto the skin, have emerged as a promising alternative to implantations for individuals seeking to enhance their capabilities and become cyborgs. These tattoos are typically created using conductive ink and flexible electronic materials, enabling them to integrate with the wearer's body seamlessly. There have been numerous research demonstrations for digital tattoos, such as monitoring vital signs, tracking physical activity, and enabling seamless communication with electronic devices. Digital tattoos are an accessible, less invasive tool in the cyborg community.

The concept of merging humans and technology raises several ethical and social questions. Some argue that the voluntary modification of one's body with technology may lead to the stratification of society, with "enhanced" individuals gaining unfair advantages over others. Furthermore, there is the potential for discrimination or stigmatization of those who choose not to become cyborgs. The trend of RFID chip implantation raises several questions about the future of human-technology integration. As technological advancements continue, these chips' capabilities will likely expand, offering even more profound enhancements to those who choose to adopt them. . One possibility is the integration of advanced sensors into RFID chips, allowing for real-time monitoring of an individual's health status. This capability could pave the way for more personalized and proactive healthcare, revolutionizing how medical professionals diagnose and treat illnesses. As human advancements in technology continue to surprise the world, the unpredictable capabilities of implanting chips might one day be like the ones we have seen in the movies. • • •