# The Architectural and Lifestyle Applications of Artificial Intelligence

# Elfren B. Paz School of Architecture, Assumption University Bangkok, Thailand

### Abstract

The 20<sup>th</sup> century did not produce the exciting 'space age' gadgets that people had predicted. But that is set to change as the speed of technological development grows even faster and more emphasis is put on lifestyle in the 21<sup>st</sup> century. The rapid advance in technology brings many benefits but also has a price. It is clear that we are inventing new ways of destroying ourselves.

**Keywords:** Artificial intelligence, smart house, hi-tech house, robot, virtual reality, fingerprint technology, eye-scan technology, voice recognition technology.

#### Introduction

"It's my prediction that Americans will live a web lifestyle within a decade", said Microsoft chairman Bill Gates back in 1997. Consumers will "simply have incorporated the web into everything we do" (Anon. 1998).

The key innovation of architecture in the second half of the 20<sup>th</sup> century is the aspiration to give buildings the sensitivity and flexibility of living systems. It is difficult to deny that through the possibilities offered by electronics, architecture tends to become a body, to become animated and develop that capacity of sensitivity, flexibility, and interactivity that is the very essence of the living body (Palombo 2000).

The housemaid of the future is a robot or cyber-butler. Just as automobiles were the biggest products of the 20<sup>th</sup> century, people might eventually look back and say that robots were the big products of the 21<sup>st</sup> century (Kitano 2002).

# **Scope and Objectives**

The scope of this study is limited to the applications of artificial intelligence to architecture and our lifestyle. The objectives of this research are as listed:

- Welcome to the hi-tech home
- Fingerprint technology
- Eye-scan technology
- Voice recognition technology
- Virtual reality
- Global positioning system and telematics
- Robots in the workplace
- Life in the GRID.

### **Welcome to the Hi-tech Homes**

As predicted, the technology that exist today (2002) are at least two of them: (i) the Microsoft hi-tech home in the USA, and (ii) the smart house in Japan.

Featuring technologies that are five to eight years away from being offered to the public, the prototype 'Microsoft Home' at the company's Redmond, Washington, campus allows researchers to test concepts pertaining to how people will use technology in their everyday lives in the future (Abreu 2002).

Around 20 of Japan's hi-tech consumer electronic and start-up companies took part in a full scale demonstration earlier this year organized by the Japan Electronic Industries Association (JEITA), and the Ministry of Economy Trade and Industry (METI). The demonstration entailed packing a house in western Tokyo suburb of Tama with around 50