E.I.T. Links

From "self-service" to "room service" :
How Emerging Information Technology is changing the way we live

"The Future is already here; It's just not evenly distributed." --Gibson

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Editor's Note:

Beginning soon, this newsletter will be available as a podcast. **Podcasts** *allow you to download an audio version of the newsletter and play it any time on your iPod or other MP3 player. You will even be able to automatically be informed with a new podcast of the newsletter is available (aren't intelligent agents great!).*

Also, I will be redesigning the website in the near future to allow for more information to be stored and easily found (tutorials, links to other information, etc.)

Links for this Issue

Medical

- [Health Chips and Patients in the U.S.](#) - This article elaborates on the idea that placing chips in people could save many lives. Former health secretary Tommy Thompson is developing a plan to do just that.

- [Automatic Health Care Plans](#). -There is now a software system that automatically generates health care plans. Based on looking at previous plans, the software uses artificial intelligence to prepare a custom plan for each patient. It also monitors each patient and reports if there is a problem.

Sensors

- [The State of Surveillance.](#) - This article deals with the continuing concept of having the ability to track virtually everyone at all times. It goes beyond the usual in describing how "biological sensors" will advance the idea even further.

- [Tiny Sensors that Can Run Forever](#) – Smart homes and other devices with built-in sensors are beginning to show up. These new sensors can last much longer and move us much closer to the world of "knowing everything about everything at all times".

Nanotechnology

- [History of Nanotechnology](#). If you are still wondering what exactly nanotechnology is and where it is headed, this article is excellent for providing an update and explanation of the history and future of nanotechnology.

- [How Nanotechnology will Transform the 21st Century](#) – Must reading if you want to see how pervasive nanotechnology will be in this century. A remarkable number of applications are forecasted for nanotech, beginning now!

Intelligent Agents

- [Software Agent Assists Air Force in Automatically Routing Emails](#) - a suite of products, including a website, that integrates with an interactive voice response system

that enables realtors to be paged when a potential homebuyer or seller submits an inquiry about a specific property listing.

- Poker Playing Bots – If you are one of the many online poker players, you better make sure that you are playing against other humans. If, instead, you are playing against a "poker bot", you might be overmatched. The bots have many years of experience and study behind them. Unlike humans, they do not get tired or take breaks. They can also calculate the odds much faster!

General A.I.

- Open Mind Project. MIT is attempting to embed "common sense" into computers by having people all over the world contribute what they know about a particular subject to the open mind project. The project already has an impressive collection of common sense axioms (e.g., "mothers are always older than their children")

- DAISY – The Digital Automated Identification System is now being planned. This system, featuring the latest in artificial intelligence and computer vision, will improve and speed up the identification and categorization of plants and animals. If it can be done for plants and animals, why not for other endeavors?

- Automated Weather Forecasts – Weather forecasts are extremely important to many industries, including those running oil rigs. Because humans are so variable, there is another approach, that of using artificial intelligence (expert systems) to automatically remove the ambiguity from weather forecasts.

- A computer that Learns Language Rules and Composes Sentences Automatically – Cornell and TelAviv Universities have developed a program that can scan documents and automatically figure out the grammatical rules, then compose meaningful sentences without human intervention.

Robotics

- Robotic Skin - Artificial skin has now been developed that can detect pressure, is stretchable, and has tactile feedback. This will allow robots to be involved in many more   tasks.

- Domestic Robots debut in Japan – These domestic robots, although expensive now, are already beginning to perform jobs that humans do. Many predict that robots will be widespread   in   the   house   soon!

- Worlds Smallest Robot emerges – The world of robotics continues to amaze. In this article, described are robots so small that 200 of them could fit lined up on one M&M. Think of the possibilities!

RFID

- Second Generation of RFID chips - RFID chips have gotten cheaper and better. This article summarizes several applications that are saving time and money.

Future

- Human Performance Enhancement in 2032 - This is a very interesting and detailed look at the possible ways in which humans might be enhanced with technological developments by the year 2032. In this article, there is a lot of detail about the various specifics of adding to the capabilities of humans.

- A Student in the Year 2015 – The student of the future will be "plugged" in at all times, relying very much on intelligent technologies to provide the right information, at the right time, in the right amount and format. This scenario paints a very interesting picture of the student of 2015.

- A look at the next 75 years – Fortune has their best futurists give predictions about the next 75 years. (NOTE: You will have to be a Fortune subscriber to see the full article).