

# E.I.T. Links

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

“We have technology, finally, that for the first time in human history allows people to really maintain rich connections with much larger numbers of people..” - Pierre Omidyar

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### *Editor's Note:*

**Please feel free to pass on the newsletter to those interested.** *Anyone wishing to receive future editions of the newsletter, please email me at: [sknode@gmail.com](mailto:sknode@gmail.com).*

**Note: This newsletter contains links found during Nov 2009, and all of the links were working at time of publication.**

*Remember, all links here can be found at [www.steveknode.com/news\\_updates.htm](http://www.steveknode.com/news_updates.htm) and previous newsletters are available at: <http://www.steveknode.com/newsletters.htm>.*

*Anyone seeking more frequent updates can follow my 'tweets' via my twitter account, <http://www.twitter.com/sknode>*

### Links for this Issue

#### AI General

- [Michio Kaku On Artificial Intelligence](#) – An excellent video by one of the best futurists, Michio Kaku, on the subject of Artificial Intelligence.  
evolve and learn new things.

#### Brain

- [A Virtual Voyage Through the Brain of a Mouse](#) (video) – Scientists are trying to build a 3-D model of the mouse brain that could be explored at various levels, from the overall structure of the brain down to its most intricate features. Such an effort requires the scientists to harness an immense amount of data.
- [Chips in brains will control computers by 2020](#) – Chips in brains, used to operate computers by brain waves, will be common by 2020 according to this prediction.

#### Chatterbots

- [Situational Interaction \(video\)](#) – Good explanation of how intelligent agents will replace humans for some activities soon. This avatar receptionist can function quite well.
- [A.I. Anchors Replace Human Reporters In Newsroom of the Future](#) – Another example of how intelligent agents will perform human functions soon, this time reporting the news.

#### Data Mining/Business Intelligence

- [Disease-Matching Software Could Save Children](#) – Software tools are being developed that can search and compare patient data at hospitals across Europe to find children with closely matched conditions. The doctors can then study how the matched patients at other hospitals were treated and whether that treatment was

successful.

### [Future](#)

- [Singularity University's Executive Program](#) – Some OUTSTANDING videos from the Singularity University's Executive Program. Included are videos about Synthetic biology, the Future of Medicine, the Future of Robotics, the Future of Energy, and Molecular Nanotechnology.

### [Information Overload](#)

- [Pill Identifier](#) – The intelligent system at this website can be used to identify unknown pills. Another example of how intelligent technology can, in some cases, outperform humans.

### [Information Visualization](#)

- [Chart Junk? How Pictures May Help Make Graphs Better](#) – Those oft-maligned, and highly embellished, graphs and charts in newspapers and other media outlets may actually help people understand data more effectively than traditional graphs, according to new research from North Carolina State University.
- [Engineers develop 3-D software to give doctors, students a view inside the body](#) – A new technology turns 2D scans into 3D images that can be used to plan a surgery or teach a lesson in anatomy.

### [Innovation](#)

- [Business Innovation Factory \(BIF\) 5 Summit Videos](#) – Very innovative and interesting videos from the recent BIF Summit 5 conference.
- [Seven Tools to Map Your Company or Life History](#) – Rather than vandalizing construction sites or tagging your old high school, one positive way to commemorate your life's path is to map it. Instead of locking away your memoirs in a journal or using a family tree to display shared connections, a map is one way you can

preserve your history while leaving the door open for others to contribute. Here are seven tools to help you get started.

- [Drive Safely Website](#) – Free application that automatically reads text messages aloud and, if desired, responds automatically.

### [Knowledge Management](#)

- [Dr David Vaine at ACTKM 2009 - video](#) – This 12 minute speech by Dr David Vaine at the ACTKM Annual Conference Dinner, on October 12 2009, outlines the key features of Fourth Generation Knowledge Management, and deals with the difficult question of managing the transition between Generation X and Generation Y in the workplace.

### [Kurzweil](#)

- [Singularity University Executive Program: Ray Kurzweil's Opening Address](#) – Kurzweil's opening keynote at the first executive program of the Singularity University.

### [Medical](#)

- [Medibots: The world's smallest surgeons](#) – The surgeons of tomorrow will include tiny robots that enter our bodies and do their work from the inside, with no need to open patients up or knock them out. While nanobots that swim through the blood are still in the realm of fantasy, several groups are developing devices a few millimetres in size.

### [Military](#)

- [Simple Test Could Offer Cheap Solution to Detecting Landmines](#) – There has been developed a custom-made bacteria that glows when in contact with explosives. When sprayed on the ground, it can be used to indicate the presence of land mines.

### [MISC](#)

- [Muscle-Bound Computer Interface](#) – Researchers have come up with another way to interact with computers: a muscle-controlled interface that allows for hands-free, gestural interaction.
- [Augmented reality system lets you see through walls](#) – An augmented reality system, using two cameras, can now be used to see behind walls.
- [Brace yourself for cloud computing](#) – The latest Gartner report on emerging technologies, highlighting Cloud computing. Also featured is the latest Gartner hype cycle.
- [Ex-Palm trio loads up on Vitamin D](#) – Three former Palm executives think they have some software that could help shake things up. Their company, Vitamin D, is releasing a public beta on Monday of software that can detect and isolate human motion, potentially allowing the growing number of surveillance cameras out there to be a whole lot more useful.
- [Cloud Computing in Plain English](#) – An excellent video from the Common Craft folks illustrating the basics of Cloud Computing.
- [Tension Monitoring Offers Accurate Solution for Grape Growers](#) – Yet another application of intelligent technology, this time to more accurately predict grape yields.

### [Nanotechnology](#)

- [A joyride through the nanoscale](#) – Chemist George Whitesides has collaborated with MIT and Harvard photographer-in-residence Felice Frankel to produce *No Small Matter*, a book of images of the micro and nanoworld. Some of the fascinating images are here.

### [NLP](#)

- [Computers Can't Answer Everything](#) – As powerful as they are, computers are still (for the time being) best used in conjunction with humans.

- [A Translator Tool With a Human Touch](#) – At I.B.M., a team of nearly 100, including mathematicians and software developers, is working on a project to create an automatic translation tool, so-called machine translation, that has the speed and accuracy to be used in instant-messaging between speakers of two different languages.
- [New iPhone app translates English into Spanish as you speak](#) – A new app for the iPhone translates English into Spanish instantly as you speak. The app, costing \$25, is like having an interpreter at your side.

### [RFID](#)

- [New RFID Chip Allows Hospitals to Monitor and Track Sponges](#) – A new RFID chip promises to make sponges smarter by giving hospitals and surgeons the ability to track where they go.

### [Robots](#)

- [Meet BigDog's Two-Legged Brother](#) (video) – The company that created BigDog, a headless robotic pack mule with an impressive gait, has now created a two-legged robot, Petman.
- [Thinking Big \(KOED artificial intelligence video starring Arnold\)](#) (video) – QUEST meets a robot that in ten years time could take care of tasks around the house that most of us would rather not do.
- [As robots become more common, Stanford experts consider the legal challenges](#) – The legal issues involving robots are just beginning to emerge. Who will be to blame if a robot-controlled weapon kills a civilian? Who can be sued if one of those new cars takes an unexpected turn into a crowd of pedestrians? And who is liable if the robot you programmed to bathe your elderly mother drowns her in the tub?

### [Search Engines](#)

- [The dizzying ambition of Wolfram Alpha](#) – In the past few months, Wolfram has been plotting the future of Alpha. Last Thursday, we saw the first stage of his plan with the link-up between Alpha and Microsoft's search engine Bing. That's just the beginning, however. Wolfram's plans for Alpha are much more ambitious.

### Sensors

- [Biosensor to Help Enlist Cancer Resistance Fighters?](#) – A powerful new biosensor will identify cells in the immune system that actively suppress tumor growth, then put them to use.
- [A Central Nervous System for Earth: HP's Ambitious Sensor Network](#) – HP labs has announced a project that aims to be the “central nervous system for Earth” (CeNSE). The system will use billions of tiny, cheap, very sensitive sensors.

### Virtual Reality

- [Virtual Reality Helps Smokers Quit](#) – Along with other maladies (arachnophobia, post-traumatic stress syndrome, etc.) virtual reality is now helping smokers quit.
- [Virtual Goods Offer An Alternative To Material Consumption As Social Lives Move To Online Networks](#) – Millions of people are spending real money on virtual clothes in online hangouts, digital items in multiplayer games and presents for their friends in social networking sites.
- [Reality Bytes](#) – Interesting perspective on where virtual reality is headed with several examples.

### Web 2.0

- [Top 10 US Cities Where Twitter is Mentioned in Craigslist Jobs](#) – Twitter is becoming a common business resource, as mentioned in many job openings.