

# La Universidad y la Industria de Software. Retos y Perspectivas

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### Nuevos Paradigmas, Nuevas Realidades, Una Revolución Informacional.

### **★ Nuevo modo de producción Capitalista**

- Cambio de los procesos implica cambios más allá de las TIC
- De la Economía Industrial a la Economía Informacional
- De los bienes materiales a los Servicios
- El Conocimiento como Materia Prima para Producir nuevo Conocimiento

#### **★ La Economía Informacional**

- Global: Procesos de Escala Mundial en Tiempo Real.
- Las economías nacionales se convierten en estrategia nacional.
- Funciona en Red interdependiente
- Requiere RR.HH. Altamente capacitados y creativos

### **★ Nueva Cultura Científica e-Investigación**

- Teoría Experimentos Simulación
- Multidisciplinaria & Colaboración Remota
- Data intensiva vs Cómputo Intensiva
- Medición y Minería de Datos.
- Nueva forma de Comunicación: preservación-diseminación del Conocimiento Ene 2013
   CUDI. la Universidad e Industria



### Tres retos y un destino

Software industrializado como paradigma

La globalización de la inteligencia en los procesos de desarrollo de Software

La Globalización del aprendizaje y la Universidad Universal



### Industrialización en Desarrollo de Software



The European Software Institute (ESI), created in 1993 by the European Commission with the support of the Basque Government, is now a Division of TECNALIA, one of the leading European research institutes. Our main activity is based on helping the software industry in their objectives or producing better software of a higher quality, on time, in the best way and at a lower cost.



#### Products & Services



The first international certification specifically designed for IT



Process improvement approach that provides organizations with the essential elements for effective process



A proven kit of executable process templates and metrics for a fast-track deplyment of



Combined reuse management and technology to implement Software Factories and effectively capitalize on your



Software Product Line Unified Modeler (PLUM), the right technology and approach for massive customisation of software products

Software Assurance

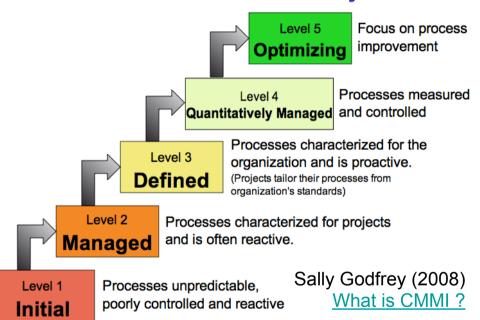
**Process** 

A common certification framework for safety critical

#### http://www.esi.es

To produce better software of a higher quality, on time, in the best way and at a lower cost.

#### **Characteristics of the Maturity levels**



#### **Capability Maturity Model Integration CMMI**

Carnegie Mellon. Software Engineering Institute



### Collective Intelligence

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Collective intelligence From Wikipedia, the free encyclopedia

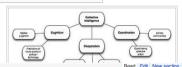
Article Talk



This article needs attention from an expert on the subject. See the talk page for details, WikiProject Sociology or the Sociology Portal may be able to help recruit an expert. (April 2010)

Collective intelligence is a shared or group intelligence that emerges from the collaboration and competition of many individuals and appears in consensus decision making in bacteria, animals, humans and computer networks. It can also be understood as an emergent property from synergies among 1) data/info/knowledge, 2) software/hardware; and 3) experts and others with insight that continually learns from feedback to produce (nearly) just in time knowledge for better decisions than these elements acting alone. [1]

The idea emerged from the writings of Douglas Hofstadter (1979), Peter Russell (1983), Tom Atlee (1993), Pierre Lévy (1994), Howard Bloom (1995), Francis Heylighen (1995), Douglas Engelbart, Cliff Joslyn, Ron Dembo, Gottfried Mayer-Kress (2003) and other theorists. Collective intelligence is referred to as Symbiotic intelligence by Norman Lee Johnson. [2] The concept is relevant in sociology, business, computer science and mass communications: it also annears in enionne finting fraquently in the form of telepathically-linked energies and substract



Predictions of Subre energy in politics / Scrinology	Cooperation	Gordinating colonial action		
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#### 1 History 2 Dimensions 3 Examples 4 Mathematical techniques 5 Digital media 5.1 Social bookmarking

- 5.2 Video games 5.3 Stock market predictions
- 6 Views 7 See also
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- 10 Further reading
- 11 External links

#### History

that acted like the cells of a single beast he called a In 1912 Émile Durkheim identified society as the sol Vladimir Vernadsky's concept of "noosphere" and H. a noosphere - a transcendent, rapidly evolving coll

#### Dimensions

Howard Bloom has discussed mass behavior - colle bacterial colonies and human societies can be expla Bloom traced the evolution of collective intelligence animal except for humans and co-operate in keeping

alk:Collective in	ntelligence						
om Wikipedia, the free encyck	opedia						
	NEW YEAR		This article is within	article is within the scope of WikiProject Systems, which collaborates on articles related to Systems science.		Systems science portal	
	Systems rating:	Quality unassessed	. importance unassessed.	Field unassessed.			
Comment Needs renaming	Contents [hide]						

#### 5 Important page-can I help? 6 Emergent consciousness and Cartesian Dualism 7 Alternative Meaning: Collective Intelligence in Computer-Based Collaboration 10 Avoid self reference A precursor of the concept is found in entomologist 11 objection to being stalked 12 Anyone willing to take a stab at improving this article? 13 removal of a para 14 Halo Videogame as an example of CI? 15 Intelligence Citations Bibliography for Articles Related to Human Intelligence 16 References

The entire political sense of collective intelligence has been removed, despite a mainstream politician (Al Gore) using it in just this sense. This is censorship, period. I request that you put some element of the material regarding political parties and constitutions as organizing collective action back in, as its removal seems simply to calls "a learning machine". In 1986 Bloom combined In opposition to the above, I state that technical views are anything but narrow. They are, in fact, quite useful in getting a deep understanding of CI.

Murray Turoff and Roxanne Hiltz researched online Collective Intelligence starting in 1986. Their measure was obtained by comparing the group problem solution with the best individual solution in the group. See http://www.wikiworld.com/wiki/index.php/CollectiveIntelligence &

The most prominent opponent of 'Collective Intelligence' was a presumably little known individual called Albert Einstein. Oh, hes the one turning in his grave right now due to the idiotic naming of this phenomenon. If there is any chance that the hideous oxymoron 'Collective Intelligence' could be renamed to, say, 'Consensus' or 'Collective Processing' or more aptly 'Collective Infinite Stupidity', please make it so. —Preceding unsigned comment added by 80.65.242.154 (talk) 11:23, 7 March 2008 (UTC)

Amen, brother! This reads like stream of consciousness of some low IQ, high pretensions individuals who overdosed on ketamine. Description of views of the supporting "scientists" reads like something straight out of "Who is who in New Agey pseudoscience". And bringing into this Thomas Jefferson who sincerely believed in educated citizenry running a free republic (not a multitude of ignorant postmodern sheeples slaving for their "global-minded" overlords) just adds insult to injury, 76,24,104,52 (talk) 03:15, 27 April 2009 (UTC)

This needs to be split into sections for easier reading/scanning. It probably could also stand to be "tightened up" a bit (i.e., edited), but maybe that's just the impression I got from scanning through the 16 paragraphs with no section breaks. - dcijr (talk) 04:46, 26 August 2005 (UTC)

Okay. I've had a bash at trying to sort it into slightly more managable chunks, but as I don't know a lot about this subject. I'm rejuctant to do any more drastic editinal In particular, the paragraphs that I put under "general concepts" don't make a lot of sense to me. Perhaps they should be edited, re-written or discarded by somebody who understands this topic

At first glance, the French version of the page appears to be much better written and structured, with more interesting real-world examples. Here's a rough translation of the headings, just to give you a flavour:

1 1 Definition

\* 1.1 Charactistics of collective systems





The original Galaxy Zoo was launched in July 2007, with a data set made up of a million galaxies imaged with the robotic telescope of the Sloan Digital Sky Survey. With so many galaxies, the team thought that it might take at least two years for visitors to the site to work through them all.

Within 24 hours of launch, the site was receiving 70,000 classifications an hour, and more than 50 million classifications were received by the project during its first year, from almost 150,000 people

A news story on a BBC Web site set the ball rolling; after just 3 hours, Schawinski recalls, traffic was so heavy that Galaxy Zoo's site, hosted by Johns Hopkins University, crashed.



Zoo has achieved to date.

The Galaxy Zoo team.

Thanks for your help, and happy classifying.

even be the first person in history to see each of the galaxies you're asked

More than 250,000 people have taken part in Galaxy Zoo so far, producing a wealth of valuable data and sending telescopes on Earth and in space

chasing after their discoveries. The images used in Galaxy Zoo: Hubble

are more detailed and beautiful than ever, and will allow us to look deeper

into the Universe than ever before. To begin exploring, click the 'How To

Take Part' link above, or read The Story So Far to find out what Galaxy



Explore galaxies

Enter a search term

Search

Latest News

Galaxy Zoo classifications in SDSS
Database
by Karen Masters - Jan 12, 2011

The latest release of data from the Sloan
Digital Sky Survey happened yesterday
(SDSS3 blog article about the release).
This ...

Voorwerpje paper submitted

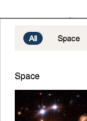
365 Days of Astronomy Podcast - Do
Bars Kill Spirals?

More on our fake AGN

Galaxy Zoo classifications in SDSS

Chris Lintott





ace Climate

Humanities

ies Nature



How do galaxies form?

NASA's Hubble Space Telescope archive provides hundreds of thousands of galaxy images.

GALAXY ZOO



#### Explore the surface of the Moon

We hope to study the lunar surface in unprecedented detail.

MOON ZOO



#### Study explosions on the Sun

Explore interactive diagrams to learn out about the Sun and the spacecraft monitoring it.

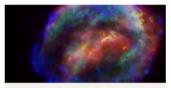
SOLAR STORMWATCH



#### How do galaxies merge?

One important area of research in astronomy studies the role of interacting galaxies.

GALAXY ZOO



#### Search for exploding stars

Help to find Supernovae, astronomers are ready to follow up.

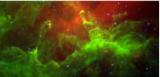
GALAXY ZOO



#### Find planets around stars

Lightcurve changes from the Kepler spacecraft can indicate transiting planets.

planethunters.org



#### How do stars form?

We're asking you to help us find and draw circles on infrared image data from the Spitzer Space Telescope.

THE MILKY WAY PROJECT



#### Find targets for the New Horizons Probe

Locate Kuiper Belt Objects that are eligible for a visit from a space probe.

ICEHUNTERS



## Malabar Malabar

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Help scientists recover worldwide weather observations made by Royal Navy ships.

oldWeather

#### Humanities



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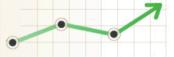
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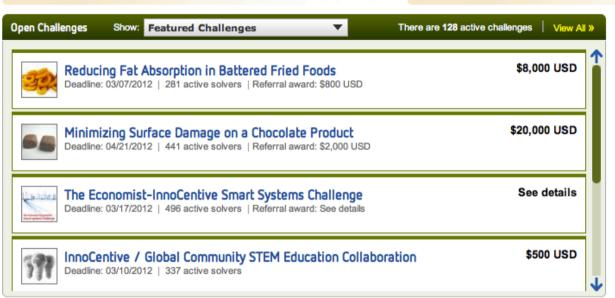
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Join us on March 29 at 2:00 pm EST to hear about NASA's experience with collaborative innovation and partnership building activities through nontraditional methodologies. NASA will discuss the obstacles encountered during its implementation of innovation, collaboration, and crowdsourcing platforms/tools as well as address the successful outcomes and lessons learned.

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Resources

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Learn why having an external talent strategy is becoming increasingly important and how it can help your company accelerate innovation. This paper also provides case studies and proven strategies for success....Download White Paper

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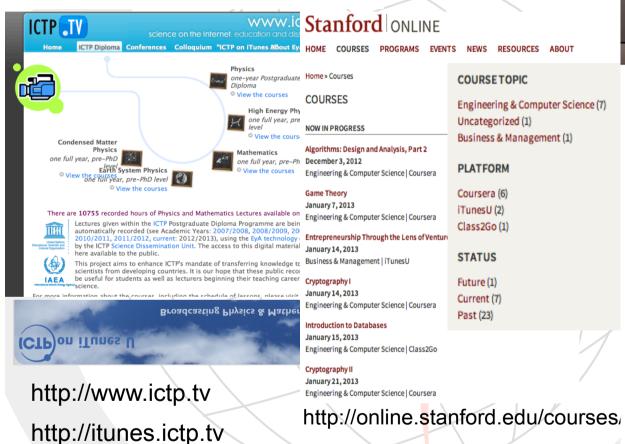








### Autoaprendizaje y la Universidad Global



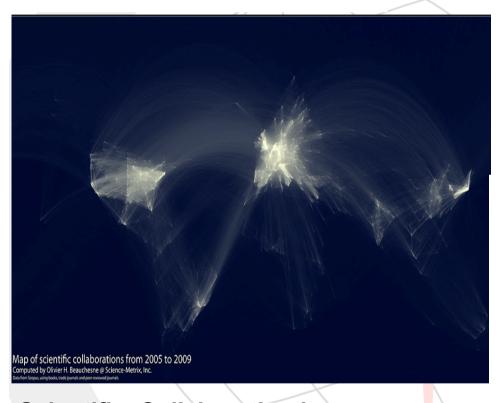


http://ocw.mit.edu/courses/

Technology

# Scientific Collaboration is reshaping the Science

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### Validación de un Modelo de Enseñanza Colaborativo y Distribuido

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(Recibido el 18 de octubre de 2011, Aceptado el 02 de diciembre de 2011)

CODILA+A. Modelo de apoyo para la preparación de actividades experimentales destinadas a la enseñanza de Ingeniería de Software en ambientes colaborativos y distribuidos geográficamente

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# Gracias

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