

# Atomian, the start of a cognitive revolution

Press pack



## The Atomian project

### **An Artificial Intelligence model so advanced, that it has required a 15-year incubation period**

Atomian technology is a cognitive computing model that has been under development for more than 15 years. Atomian allows us to simulate the brain's cognitive processes such as language recognition and the generation of knowledge and is the result of years of research into the fields of information theory, computation, neurolinguistics and psychology.

At its core, Atomian technology has a knowledge organisation system based on indivisible minimum units that we call atoms. This system allows Atomian to represent any form of knowledge, access it by conducting queries in natural language and obtain conclusive answers. It also optimises processes by automating certain operational decisions, facilitating people's work and increasing their quality of life.

## The founder and visionary

### **Miquel Montero, CEO and founder of Atomian, the soul behind this technology**

Software engineer, data scientist and founder of several technology companies, Miquel Montero (Barcelona, 1976) has dedicated 15 years to constructing the core of Atomian's cognitive architecture. A technology capable of replicating certain functions of the human brain and which brings together all the latest results in cognitive science and machine learning. In 2014, Miquel founded the AI start-up called Atomian, which focuses on human-machine interaction through natural language. In recent years, Atomian has built products and business solutions for the Health, Banking and Insurance sectors, among others.

**LinkedIn:** <https://es.linkedin.com/in/miquelmq>

**Twitter personal:** @mike\_atomian

## Partners and advisors

### **An ecosystem of investors and advisors who are completely committed to the project.**

Main Advisors:

**Marc Costafreda**, Entrepreneur & CEO of Ellipsis Technologies. Co-founder and Managing Director of the digital consultancy company Agile Sales Pro. Graduate in International Trade from ESCI-Universitat Pompeu Fabra, Master's in ICT Management from La Salle-Universitat Ramon Llull and PDG IESE. Experienced in the areas of Online Management, start-ups and investments.

**Enric Nolis**, Executive Director at IBM Catalonia until 2005, investor and advisor for technology start-ups. In-depth knowledge of the technology sector.

**Sergi Pallarès**, Co-Founder and CEO of StockCrowd. Telecommunications Engineer and PDG IESE, an entrepreneur who has developed and run his own technology companies for the last 10 years.

## **A business model based on growth through Partners.**

Atomian is in the process of creating an ecosystem of collaborators and technological partners who will commercialise and implement our product, and contribute to the development of new technology applications. Currently Atomian's main partners are **Everis**, **Between Technology**, **Hound Line**, **Inforber** and **Olivia**, from the Technology sector and **Grupo Pulso** and **Asho**, from the Health sector.

## **Products**

### **A technology company that develops cognitive computing systems which are able to understand companies and organisations' data**

Disruptive technology, market orientation and products that add value are the characteristics that best define Atomian's philosophy, a cognitive computing company that develops systems which serve to extract knowledge and automate processes in companies, hospitals and other organisations that generate large amounts of data.

### **Atomian allows companies to access their own data using natural language.**

### **The Atomian interface is an easy and intuitive tool**

A query can be asked using natural language and a conclusive answer is given, not one based on probabilities or pre-programmed answers. Unlike other tools, Atomian creates the answer in real-time, responds specifically to the query and displays the information in the most appropriate format. It can be a phrase, a table, a listing or a chart. The response obtained can be stored on the board, and continuously updated, or shared by email.

The Atomian board has different types of panels or query boxes, in addition to the Simple query panel, and a History section, which stores recent queries and keeps them up-to-date. The Alerts panel allows you to create management

indicators with scheduled alerts; the Progress panel is used to compare actual data with fixed targets and finally the Configurable panel allows you to create a query with open fields to share with other users, and keeps the information up-to-date.

## **Automate processes to improve companies' productivity.**

Atomian learns and automates procedures in which a decision is needed, in different scenarios. You can improve the performance of a process when you automate a decision based on its case history. For example, in the resolution of technical incidents departments, Atomian decides which resolution team should be assigned to the incident.

## **A solid commitment by the health sector.**

Atomian has entered the healthcare sector with an innovative, valuable product: Atomian Medical Records, developed in collaboration with the *Hospital Universitari Sant Joan de Reus*.

Atomian Medical Records is a tool that allows medical teams to ask questions using natural language about information contained in the hospital's medical records database and then provides results and knowledge that improves the quality of care given and facilitates research projects. Atomian Medical Records allows hospital managers to extract information faster and in real time and optimises healthcare processes and sustainability models.

Unlike other software, Atomian Medical Records allows, in a single interface, the exploitation of the structured (closed fields) and unstructured (open text fields) data that are contained in hospitals' clinical history databases.

## **Cognitive software products for companies and hospitals.**

Atomian has defined a set of software products to offer cognitive computing solutions to different types of organisations.

### **Atomian Go**

Add-on solutions for leading business software manufacturers.

### **Atomian Focus**

Products for companies' specific functional areas and diverse activities.

### **Atomian Cloud**

Atomian solutions in the cloud that integrate all data sources into the Atomian model.

### **Atomian Healthcare**

Products for the exploitation of data in the health sector.

### **Atomian Performance**

Product line for the improvement and automation of business processes.

Avda. de les Corts Catalanes, 9-11  
Planta 2, porta 3

08173 Sant Cugat del Vallès  
Barcelona (Spain)

info@atomian.com  
+34 935 040 991  
www.atomian.com



## Current products in the launch phase include:

**Atomian Clinical Research** for Data Discovery of Clinical Histories.

**Atomian Go NAV** applied to Microsoft Dynamics NAV Management Software (ERP).

**Atomian Dispatch** for the automation of incoming message processes.

## Atomian Technical Data Sheet

**Offices:** Avda. Corts Catalanes, 9-11, 08173 St. Cugat del Vallès (Barcelona).

**Business areas:** Large company, SME and Health Sector.

**Staff:** 13 people

- **CEO:** Miquel Montero
- **COO:** Miguel González
- **Marketing Manager:** Amaia Marsà
- **Financial Director and co-founder:** Luís J. García
- **Healthcare Sales Manager:** Josep Rodriguez
- **Sales Manager, Partners and Alliances:** Joan Viñas
- **Lead developer and co-founder:** Guillem Ysàs

**Networks and website:**

- **www.atomian.com**
- **Twitter:** @atomian\_info
- **LinkedIn:** [https://www.linkedin.com/company/atomian?trk=company\\_logo](https://www.linkedin.com/company/atomian?trk=company_logo)
- **You Tube:** <https://www.youtube.com/channel/uc2oo6codnupzptevjed2ggw>

### Communications Department

<http://www.atomian.com>

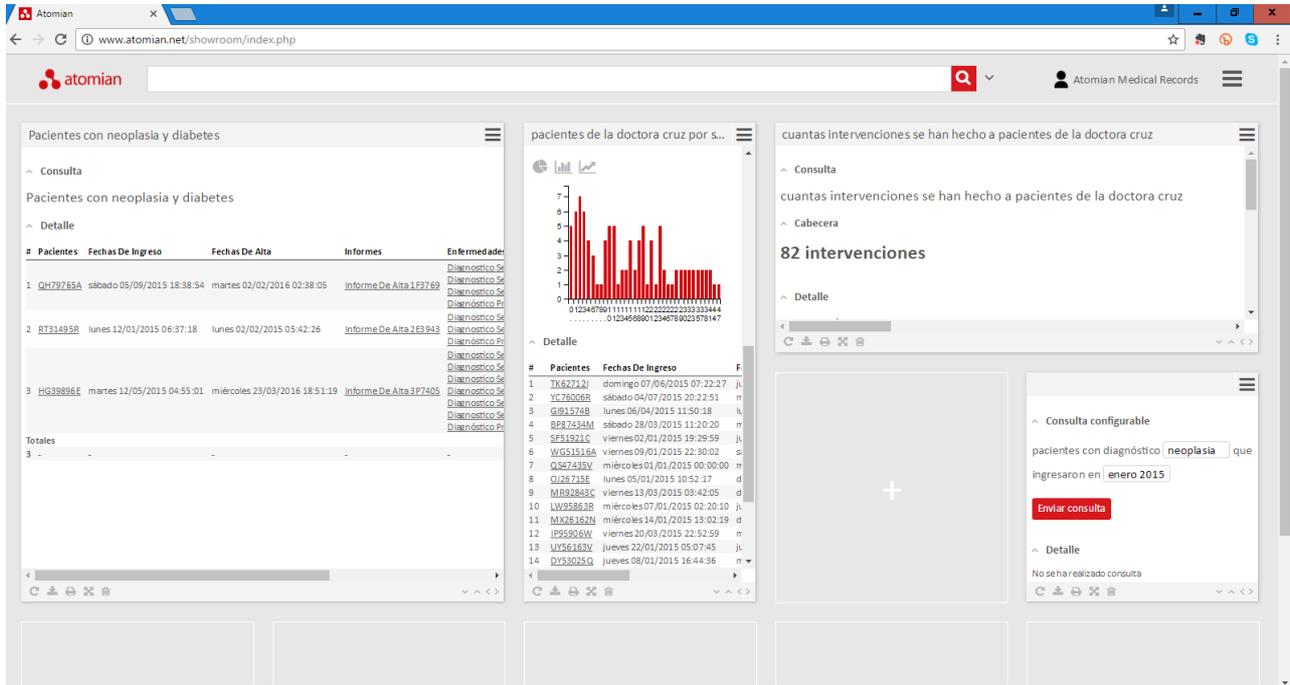
[press@atomian.com](mailto:press@atomian.com)

María Fernández / Laura Sali

685 96 75 45 / 667 656 269



## Annex I



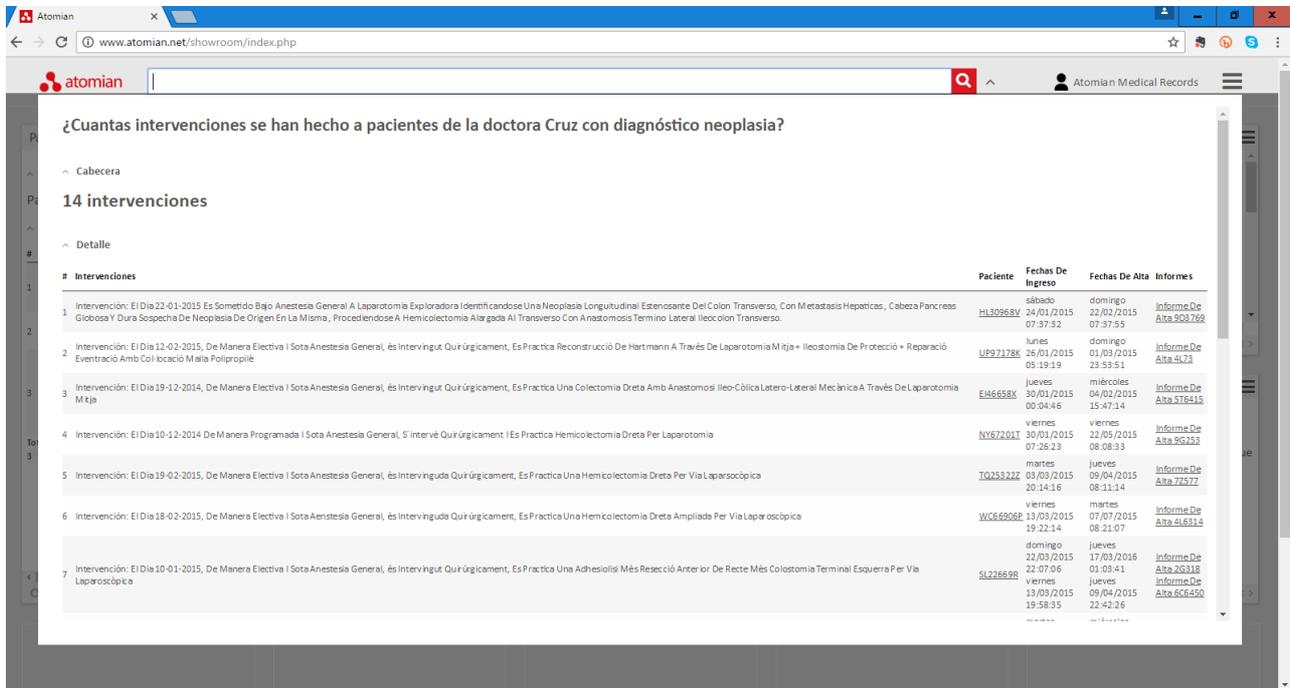
The dashboard displays patient statistics for 'pacientes de la doctora cruz por s...'. It includes a bar chart showing the number of interventions over time. Below the chart is a table of patient details:

#	Pacientes	Fechas De Ingreso	Fechas De Alta	Informes	Enfermedades
1	QH79765A	sábado 05/09/2015 18:38:54	martes 02/02/2016 02:38:05	Informe De Alta 1 F3769	Diagnostico Se Diagnostico Se Diagnostico Pi
2	RT31495B	lunes 12/01/2015 06:37:18	lunes 02/02/2015 05:42:26	Informe De Alta 2 E9943	Diagnostico Se Diagnostico Se Diagnostico Pi
3	HG39896E	martes 12/05/2015 04:55:01	miércoles 23/03/2016 18:51:19	Informe De Alta 3 P7405	Diagnostico Se Diagnostico Se Diagnostico Se Diagnostico Se Diagnostico Pi

Below the table is a 'Totales' section and a 'Detalle' section with a list of patients and their admission dates:

#	Pacientes	Fechas De Ingreso
1	TK62712I	domingo 07/06/2015 07:22:27
2	YC76006R	sábado 04/07/2015 20:22:51
3	GB91524R	lunes 08/04/2015 11:50:18
4	B922434H	sábado 18/05/2015 11:20:30
5	SF51921C	viernes 02/01/2015 19:29:59
6	W651516A	viernes 09/01/2015 22:30:02
7	Q647433V	miércoles 01/01/2015 00:00:00
8	QJ26715E	lunes 05/01/2015 10:52:17
9	M892843C	viernes 19/03/2015 09:42:05
10	LU95863B	miércoles 07/01/2015 02:20:10
11	ML26162N	miércoles 14/01/2015 13:02:19
12	IP95906W	viernes 20/03/2015 22:52:59
13	UY56163V	jueves 22/01/2015 05:07:45
14	DY53025G	jueves 08/01/2015 16:44:36

The Atomian web interface Board



The search engine displays the results for the query: '¿Cuántas intervenciones se han hecho a pacientes de la doctora Cruz con diagnóstico neoplasia?'. It shows 14 interventions with the following table:

#	Intervenciones	Paciente	Fechas De Ingreso	Fechas De Alta	Informes
1	Intervención: El Día 22-01-2015 Es Sometido Bajo Anestesia General A Laparotomia Exploradora Identificandose Una Neoplasia Longitudinal Ezenosante Del Colon Transverso, Con Metastasis Hepaticas, Cabeza Pancreas Globosa Y Dura Sospecha De Neoplasia De Origen En La Misma, Procediendose A Hemicolectomia Alargada Al Transverso Con Anastomosis Termino Lateral Illeocolon Transverso.	HL30968V	sábado 24/01/2015 07:37:32	domingo 22/02/2015 07:37:55	Informe De Alta 808269
2	Intervención: El Día 12-02-2015, De Manera Electiva I Sota Anestesia General, és Intervingut Quirúrgicament, Es Practica Reconstrucció De Hartmann A Través De Laparotomia Mitja + Ileostomia De Protecció + Reparació Eventració Amb Col·locació Malta Polipropilè	UP97178X	lunes 26/01/2015 05:19:19	domingo 01/03/2015 23:53:51	Informe De Alta 4173
3	Intervención: El Día 19-12-2014, De Manera Electiva I Sota Anestesia General, és Intervingut Quirúrgicament, Es Practica Una Colectomia Dreta Amb Anastomosi Illeo-Còlica Latero-Lateral Mecànica A Través De Laparotomia Mitja	EI46668X	jueves 30/01/2015 00:04:46	miércoles 04/02/2015 15:47:14	Informe De Alta 516413
4	Intervención: El Día 10-12-2014 De Manera Programada I Sota Anestesia General, S' Intervé Quirúrgicament I Es Practica Hemicolectomia Dreta Per Laparotomia	NY67201I	viernes 07/01/2015 07:26:23	viernes 22/05/2015 08:08:33	Informe De Alta 36253
5	Intervención: El Día 19-02-2015, De Manera Electiva I Sota Anestesia General, és Intervinguda Quirúrgicament, Es Practica Una Hemicolectomia Dreta Per Via Laparoscòpica	TQ25322Z	martes 03/03/2015 20:14:16	jueves 09/04/2015 08:11:14	Informe De Alta 72677
6	Intervención: El Día 18-02-2015, De Manera Electiva I Sota Anestesia General, és Intervinguda Quirúrgicament, Es Practica Una Hemicolectomia Dreta Ampliada Per Via Laparoscòpica	WC66906Z	viernes 19/03/2015 19:22:14	viernes 07/07/2015 08:21:07	Informe De Alta 416314
7	Intervención: El Día 10-01-2015, De Manera Electiva I Sota Anestesia General, és Intervingut Quirúrgicament, Es Practica Una Adhesiolisi Més Resecció Anterior De Recte Més Colostomia Terminal Esquerra Per Via Laparoscòpica	SL22669R	domingo 22/03/2015 22:07:06	jueves 17/03/2016 01:03:41	Informe De Alta 26318
			viernes 13/03/2015 19:58:35	jueves 09/04/2015 22:42:26	Informe De Alta 606450

The Atomian web interface search engine

## Annex II



Miquel Montero, Atomian CEO



The Atomian Team