



Scientific and
Technological
Computing
Department



Canary Islands Institute of Technology (ITC)



Technology and Innovation for a Sustainable Development

itc INSTITUTO TECNOLÓGICO
DE CANARIAS



Scientific and Technological Computing

Promoting the intensive use of Information Technologies in Administration, Research and Strategic Economic Sectors of the Canary Islands



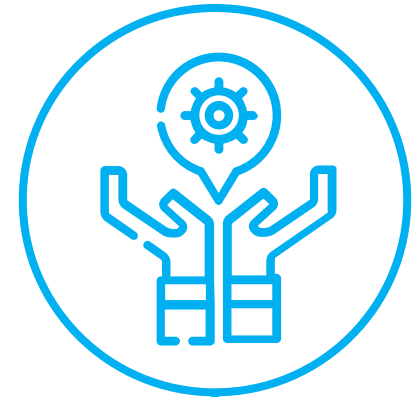
To respond to the **ICT needs** of public organizations and companies

To develop **research and innovation projects** in specific areas, in collaboration with Canary universities, technology centers and companies



To provide **services to the Canary Islands Government**, developing e-government applications that improve their management and service to citizens

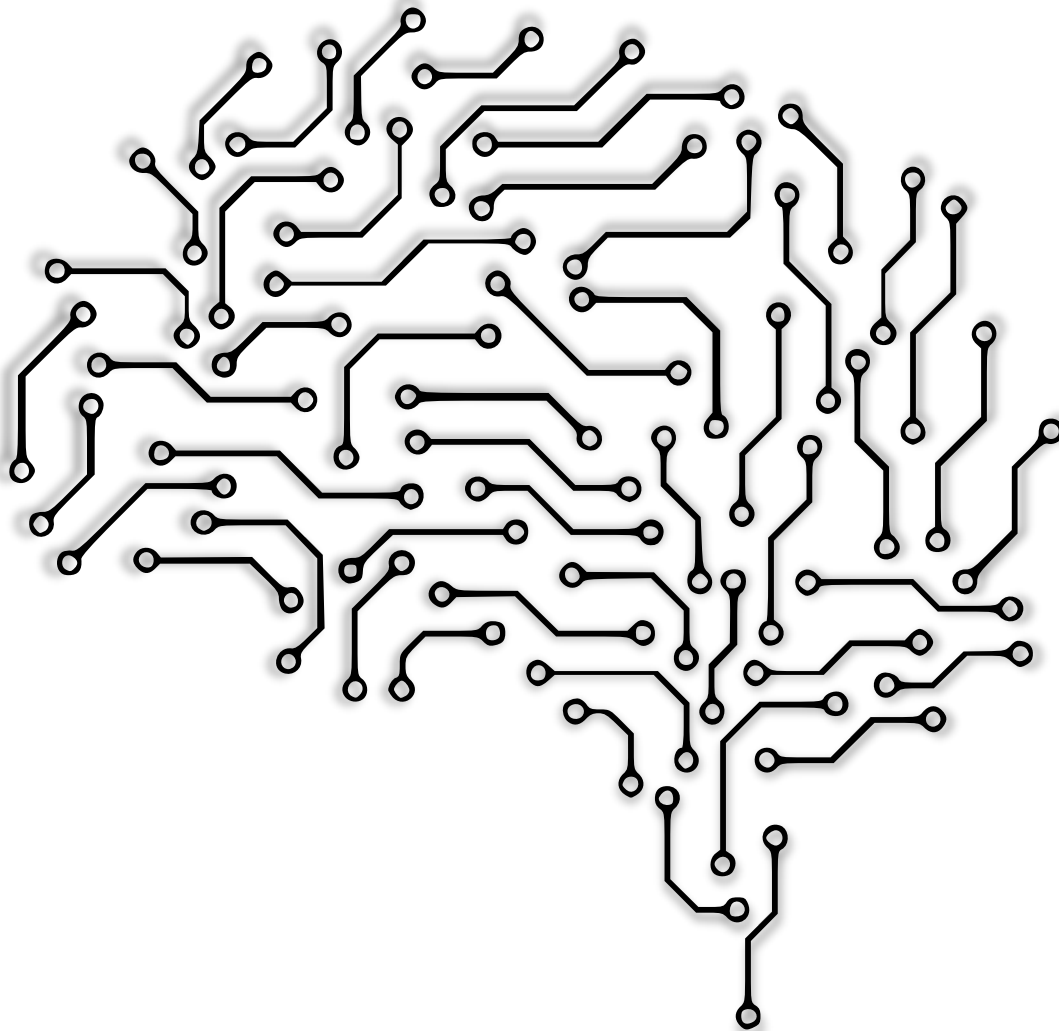
To promote the technological development of **small and medium-sized companies** in strategic sectors for the Canary Islands (tourism, agriculture, ...)



Our mission

Scientific and Technological Department

Department



{ } **Interdisciplinary work team** with extensive experience (26 people)

{ } Established in **2005**

{ } **Budget** (2021): € 1,7 M

{ } High percentage of **own developments**

{ } Lines of work and services aimed at the **progressive digital transformation of the public sector**

2007

Development of tools for Electronic Administration in Canary Islands public administrations

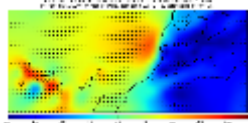
The creation and management of e-government (electronic headquarters, electronic registry, electronic document file, telematic management of files and subsidies, ...) begins in collaboration with public administrations of the Canary Islands, in order to optimize their relationship with citizens, fundamental in a society with high access to technology and information



2008

Software development in the fields of energy meteorology (forecasting) and the study of Climate Change

Specific studies are carried out on meteorological prediction systems that allow anticipating renewable energy production and common platforms are created for different regions to study the effects of climate change



2010

Development of software and applications for the genetic coding of species (and other sectors in the field of bioinformatics)

The ITC, together with the “Jardín Canario Viera y Clavijo” of the Cabildo of Gran Canaria, participates in the DEMIURGO project, that addresses the systematic conservation of all populational genetic information associated with endemic elements of the Canary Islands, Madeira and Azores archipelagos, by means of tools such as an international web of genetic-population data matrices, the relationship with other databases and the enrichment of existing data in local DNA banks



Milestones

Milestones

2021

ITC Digitization Plan

A Global Management System is launched in different phases, with the goal of the "Single Data", composed of three pillars: economic module, project management module and document module

2016

Development of Virtual Reality apps

Virtual reality applications are developed to contribute to the knowledge and exploration of the Gran Canaria Botanical Garden: Realization of interactive flights of areas of the garden, realization of 360 panoramic routes, realization of interactive virtual 3D photographic gallery



2013

Climatique Project

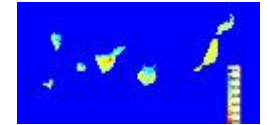
Launch of the Canarias-Souss Massa Drâa (Morocco) climate change observatory to study the effects on natural resources and future climate scenarios (CLIMATIQUE)



Canary Islands Solar Map

2011

Elaboration of the Canary Islands Solar Radiation Map, a high resolution solar resource based on detailed information from the radiometric stations of the Archipelago and the study of satellite images, as well as simulations obtained through meteorological prediction methods (MM5)



Activity Lines - Services

E-government

- To support to the Canary Islands Government in the development of e-government applications, management of subvention programs and electronic files

Advanced technological developments in R&D&I projects related to Renewable Energies, Water, Biotechnology, ...

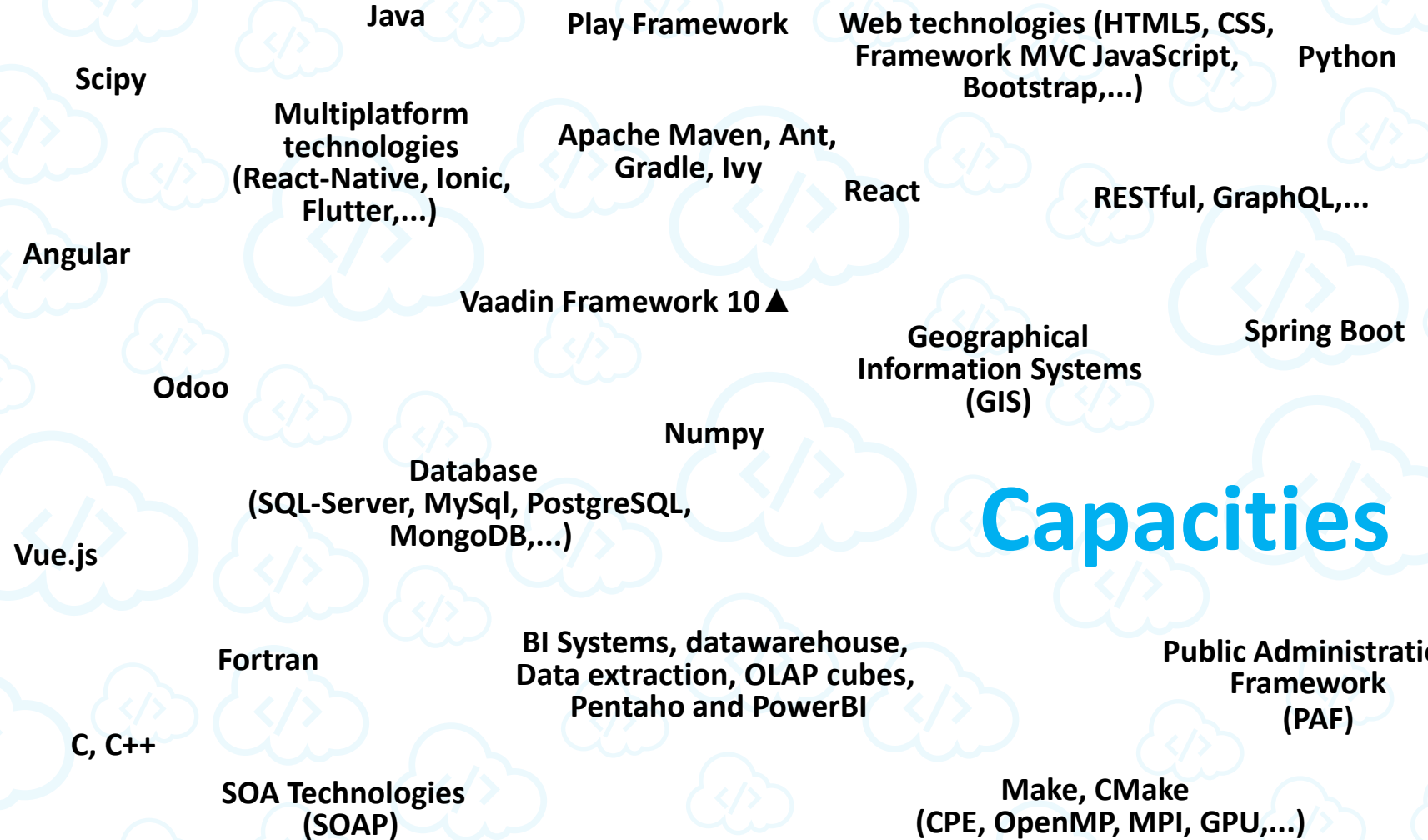
- ICT support to all departments of the company: GIS - Big Data - Prediction Models - Control Models...

Business Management Systems - Public Administration

- Specialisation in public companies and R&D&I centres.
- Focus on calls for grants/commissions/subsidies to facilitate the management of the entire organisation

Virtual and Augmented Reality

- Advanced information / data display
- Graphic-multimedia design support to the entire organization
- Realization of innovative projects

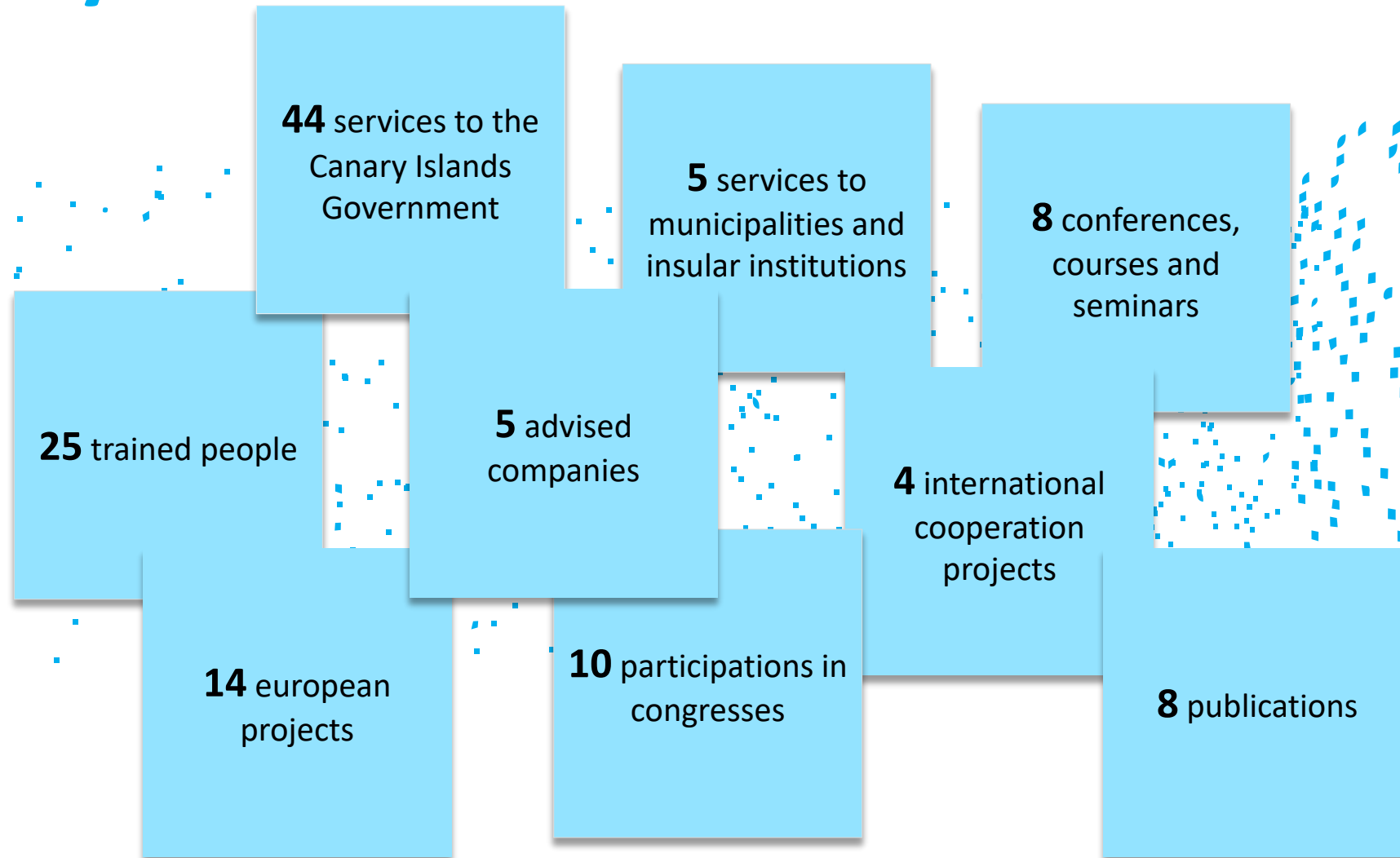


International Cooperation



- » **International** R&D&i projects (H2020, MAC)
- » **Collaboration** with high-level entities and institutions
- » **Advanced** technological developments
- » **Solutions** for less developed regions
- » **Multiple fields** such as Renewable Energies, Water, Climate Change, ...

Trajectory



Challenges



To offer the high capacity in **e-government** to new management centers of the Canary Islands Government



To support and use the **ICT cooperation networks** that we maintain with neighboring countries: Morocco, Cape Verde, Azores and Madeira



To **improve the benefits and capabilities** of our e-government system by adapting and implementing it in Councils and Municipalities



To continue with the development of **interactive tools and gamification technologies** for educational and informative purposes on scientific knowledge and resources



To extend our **developed Business Management** System to other public companies



To promote the use of **ICTs based on open innovation** methodology in Agriculture and Tourism



Development of new ICT tools that improve research in fields such as **Climate Change, Water, Renewable Energies, Biotechnology**



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Scientific and Technological Computing Department



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