I'm Jorge Sancho, a techie from Zaragoza (Spain), whose interest is easily captured by anything related to networks and security. During my PhD at the University of Zaragoza, I worked with widely used authorization standards, such as OAuth 2.0, and modern Secure Multiparty Computation (SMC) protocols to enable privacy-preserving L7 firewalling. During this time, I taught Network Management and Network and Service Security at the university, and I was also professor of the Secure Architecture module in the Advanced Cibersecurity Course aimed at the Joint Cyber Defense Command (MCCD) of the Spanish Army.

Currently, I work at BSH Hausgeräte GmbH as remote member of the core product security team, based in Regensburg (Germany). As Security Manager of one of our embedded linux platforms, I define, prioritize, and monitor security controls to ensure compliance with recognised customer IoT norms, such as the ETSI 303 645, and keep the risk within an acceptable threshold. Additionally, I also handle Security Vulnerability Management tasks.

Education

o **Doctoral Program in Information and Communication Technologies in Mobile Networks.** 2016 - 2021.
By the Universities of Basque Country, A Coruña, Cantabria, Oviedo and Zaragoza, obtaining the Cum Laude mention. It was founded via a FPU grant (Government of Spain).

o **Master's Degree in Telecommunications Engineering.** 2014 - 2016.
By the University of Zaragoza, obtaining the Extraordinary End of Master Award for the best academic results.

o **Bachelor's Degree in Telecomunications Technology and Services Engineering.** 2010 - 2014
By the University of Zaragoza, obtaining the Extraordinary End of Bachelor Award for the best academic results.

Experience

o **Product Security engineer at BSH Hausgeräte GmbH.** 2021 - Today.
Product Security Engineer at the BSH Hausgeräte GmbH, with the role of Security Manager for one of our embedded linux platform.

o **Cybersecurity researcher at University of Zaragoza.** 2016 - 2021
Research on the design of secure architectures, focusing on Identity and Access management, API security and Secure Computation.

o **Cybersecurity professor at ACING.** 2018 - 2020.
Assistant (2018-2019) and Responsible (2020) for providing the "Secure Architectures Design" module in the Advanced Cyberdefense Course at the Army Academy of Engineers (ACING).

o **Cybersecurity researcher at Alexandra Instituttet.** 2018.
Research stay at Alexandra Instituttet Security Laboratory, Aarhus (Denmark).

Thesis

o Desing and evaluation of novel authentication, authorization and border protection mechanisms for modern information security architectures.

Journal articles

o Authorizing Third-Party Applications Served through Messaging Platforms.
Jorge Sancho, José García and Álvaro Alesanco. Sensors 21.17, 2021.

o Oblivious Inspection: on the confrontation between system security and data privacy at domain boundaries.
Jorge Sancho, José García and Álvaro Alesanco. Security and Communication Networks, 2020.

o Biometric authentication using the PPG: a long-term feasibility study.
Jorge Sancho, Álvaro Alesanco and José García. Sensors 18.5, 2018

Conference presentations

o Distributed access control for cross-organizational healthcare data sharing scenarios.
Jorge Sancho, José García and Álvaro Alesanco. In European Medical and Biological Engineering Conference 2020.

o Patient identification workflow for seamless EHR access during patient follow-up.
Jorge Sancho, José García and Álvaro Alesanco. In European Medical and Biological Engineering Conference 2020.

o On the privacy enhancement of in-transit health data inspection: a preliminary study.
Jorge Sancho, Gert Mikkelsen, Jonas Lindstrøm, José García and Álvaro Alesanco. In Mediterranean Conference on Medical and Biological Engineering and Computing 2019.

o Photoplethysmographic authentication in long-term scenarios: a preliminary assessment.
Jorge Sancho, Álvaro Alesanco and José García. In EMBEC & NBC 2017.

Contracts

o Characterization, application and definition of cybersecurity policies over a critical communications system.
Founded by Teltronic S.A.

o Implementation of a license management system and protection of comercial information in distributed environments. Founded by Urbisan Proyectos e Innovación S.L.

Supervision of final year projects

o Design and implementation of a graphic interface to the management of a PHR based on FHIR data using ELK.
Master's theses. Manuel Hernández Rodrigo.

o Design and implementation of a bot for the messaging platform Telegram that allows the remote management of a security camera. Undergraduate dissertation. Arturo Manuel Dito Iranzo.

Teaching

o Network and service security. Bachelor's Degree in Telecommunications Technology and Services Engineering. From the 2017-18 course to the 2019-20 course.

o Network management. Bachelor's Degree in Telecommunications Technology and Services Engineering. From the 2017-18 course to the 2019-20 course.