

## Senior IT Security Architect

**Wanted:** A driven IT Security Engineer who can translate abstract frameworks into concrete, defensible architecture and lead the way in the fight against cyber threats in the healthcare and education sectors.

**Organisation:** SHIELD vzw

**Location:** Based at SHIELD's head office at Corda Campus Hasselt, with regular meetings at our 110 member organisations. These are hospitals and higher education institutions throughout Belgium.

**About SHIELD:** SHIELD vzw is a forward-thinking alliance between hospitals and higher education institutions, with the aim of creating a leading-edge IT infrastructure and (cyber) security architecture. Founded by Jessa Hospital, Hasselt University and East Limburg Hospital, SHIELD strives to harmonise our members' approaches and support them on their journey towards NIS2 compliance and CyFun certification. We build bridges between policy and practice.

### The Challenge: SHIELD Validated Design (SVD)

The reality in healthcare and education is complex: outdated medical devices that cannot be patched, the need for 'zero downtime', and a constant tension between ease of use (speed in A&E), security (Zero Trust) and policy objectives (ISMS, Audit).

To address this, we are developing the **SHIELD Validated Design (SVD)**. This is not a theoretical document, but a living blueprint of end-to-end best practices based on a realistic reference case: the *SHIELD University Hospital (SUH)*. As an engineer, you will help to build, test and validate this model, so that our members have a 'menu' of proven solutions at their disposal.

### Your Role

As an IT Security Engineer, you are the technical driving force who bridges the gap between policy (the SHIELD Library and CyFun) and the often-challenging reality on the shop floor. Working under the operational leadership of the SHIELD Security Architect, you'll collaborate closely with the Security Officers of our member organisations and SHIELD partners. Having gained hands-on experience as a systems administrator, you understand the impact of security measures on day-to-day operations. You don't design ivory towers, but architectures that stand up to both technical and operational challenges.

You have a **two-pronged focus**:

1. **Building & orchestrating (Architecture):** You design, document and validate the modular building blocks of the SHIELD Validated Design.
2. **Sectoral Resilience (Threat Intelligence):** You act as the 'eyes and ears' of the sector by proactively analysing threats that specifically target the healthcare and education sectors.

## Tasks & Responsibilities

### Architecture & Design

- **Developing the SVD:** You will devise specific solutions in accordance with the 'Why-What-How' principle. You will translate a business or clinical need (e.g. protection against ransomware on building management systems) into a robust architectural design and concrete, workable blueprints.
- **Policy to Execution:** You translate standards frameworks such as **CyFun (Cyber Fundamentals)** and ISO 27001/ISO 27002 into technically validated measures. You ensure that policies do not end up gathering dust in a drawer, but become 'technically enforceable' at the network and system levels.
- **Vendor Integration:** You determine how different security products (firewalls, EDR, NAC, SIEM) from various vendors integrate seamlessly with one another within the SUH model.
- **Design Validation:** You will assess whether the designed architectures can withstand the realistic scenarios of the fictional, yet representative, SHIELD University Hospital (SUH).
- **Compliance Mapping:** Translating regulatory frameworks (specifically CyFun) into concrete technical measures within the design

### Threat Intelligence & Hunting

- **Sector-Specific Threat Analysis:** You analyse the current threat landscape specifically for hospitals and universities.
- **Threat Hunting:** You do not wait for the alarm to go off. You proactively search for indicators of compromise (IOCs) and vulnerabilities within members' infrastructures.
- **Advice & knowledge sharing:** Based on your threat intelligence, you feed new requirements into the SHIELD Validated Design to systematically prevent future attacks. You share this expertise with the security officers of affiliated members.

## Your Profile

- **Education:** At least a Bachelor's degree level of working and thinking in IT or cybersecurity.
- **Experience:** You have substantial, demonstrable experience as a Security Engineer or Architect. Experience within the healthcare sector or higher education is a strong asset. A solid foundation as a systems administrator/engineer is an advantage. You understand the complexity of clinical applications, medical devices, laboratories, downtime procedures and the dynamics of an IT service in the healthcare sector.
- **Framework Knowledge:**
  - You have in-depth knowledge of **CyFun** (Basic/Important/Essential levels).
  - You are familiar with standards such as NIS2, ISO27001 and CIS Controls.
- **Technical Expertise:**
  - You are not tied to a single vendor, but understand the architecture of various security stacks.
  - Strong knowledge of **Network Security** (Segmentation, NGFW), **Endpoint Security** (EDR/XDR) and **IAM** (MFA, PAM).
  - An understanding of SIEM/SOAR principles and monitoring is essential for your threat hunting tasks.
- **Languages:** You speak and write **English** and **Dutch** or **French** fluently.
- **Personality:**
  - Analytical, pragmatic and a strong communicator. You can clearly explain a complex design to both an IT administrator and management.
  - You thrive in a 'greenfield' environment where you are free to help shape the direction yourself.

## What we offer

- **Social impact:** You are not securing an anonymous enterprise environment, but are helping to build the digital protection of the entire Belgian healthcare and education sectors. Your work protects patient data and critical continuity of care.
- **A unique concept (SVD):** You'll have the chance to pioneer the SHIELD Validated Design and the SHIELD University Hospital (SUH) – a living lab, unique in Belgium, that seamlessly combines theory and practice.
- **Team & culture:** A full-time role within an ambitious, intellectually challenging team of security experts, offering a high degree of autonomy and scope for personal initiative.
- **Terms and conditions:** A competitive salary package tailored to your level of experience, including fringe benefits and extensive training opportunities to keep your expertise (e.g. in advanced architecture or privacy) up to date.