

Full-Stack Software Engineer (.NET & React)

Context

fetaLife Technologies is a spin-off of BCNatal | Fetal Medicine Research Center (Hospital Sant Joan de Déu, Hospital Clínic Barcelona, and Universitat de Barcelona).

Our purpose is to research, develop, manufacture, and commercialise medical devices and technologies to **improve current treatment for extremely premature babies**.

We are currently developing a disruptive and innovative device, a liquid incubator for extremely preterm babies. As part of this device, we are developing a 24x7 monitoring system.

We are looking for an **enthusiastic and proactive Full-Stack Engineer** to join the team developing the critical software infrastructure that enables this monitoring system.

Job summary

As a full-stack software engineer, you will join a **small, high-performance engineering team** responsible for building a next-generation critical care monitoring platform.

This is not a software maintenance job, but a development one. We are building a complex product with Medical Device certification from a functional, validated prototype. You will work side-by-side with the current lead engineer, sharing ownership of the codebase, discussing architecture, and deploying features that directly help doctors make informed decisions in critical environments.

Our stack

We are proud of our stack. We avoid legacy tools and focus on Developer Experience (DX) and performance:

- **Backend:** .NET (C#) with Entity Framework Core & SignalR.
- **Frontend:** React, TypeScript, Vite, TanStack Router.
- **Database:** PostgreSQL + TimescaleDB (Time-series data).
- **Auth:** Keycloak.
- **Monorepo:** Nx.

Job duties and responsibilities

- **End-to-End Development:** You will own features from the SQL migration to the React component.
- **Architecting for Performance:** We handle high-frequency physiological data. You will optimize API endpoints and frontend rendering (using virtualization, memoization, and efficient state management).
- **Quality & Safety:** Write robust, type-safe code. In our domain, reliability is not optional.
- **Collaboration:** Participate in code reviews, architectural discussions, and direct feedback loops with clinical staff.
- **Reporting:** Writing reports on the developments achieved, and keep them updated.
- **Independence:** Independent planning and working, following strict timelines.
- **Flexibility:** Carry out any other task that falls within the job's objectives and purposes, as required by the management team.

Key Requirements

- **Qualifications:** Have successfully completed a Bachelor's or Master's degree in IT, Engineering, or a related field.
- **3+ years** of hands-on experience in Full-Stack development.
- Strong proficiency in **C# / .NET** (Web APIs).
- Comfortable working with **SQL** databases and **Entity Framework Core**.
- Proficiency in **TypeScript** and **React**.
- **A "Product Mindset":** You care about *why* we are building this, not just *how*. You prioritize the user experience of the clinicians using the tool.
- **Eye for Design:** can build polished, intuitive, and accessible UIs.
- Fluent in **English and preferably Spanish**. Catalan is a plus.
- **Soft-skills:** Attention to detail, capacity to prioritize, and organizational skills.

Nice-to-haves

- Experience with the **TanStack Ecosystem** (especially TanStack Router & Query).
- Knowledge of **Kubernetes, Docker**, and CI/CD pipelines.
- Familiarity with Healthcare standards (**FHIR, HL7**) or Time-Series data handling.
- Experience working in a start-up environment.

We offer:

- Participate in an innovative project that is constantly updated and has impact in the real-world.
- A competitive salary according to your experience and profile (proposes range **35.000€ - 38.000€** annual gross).
- High decision-making power within a small and dynamic team.
- Have a flexible timetable, with the support you need to conciliate and balance your personal and professional life.

- Be part of an expert, young, dynamic, innovative, and enthusiastic team united by a common purpose: to improve the prognosis of extreme preterm newborns.
- A professional work environment, which is really distinguished by our humanity and closeness. And where we take care of diversity and inclusion. Diverse viewpoints (medical, scientific, technological, and business-oriented), your curiosity, and diverse capabilities that strengthen our focus and fuel our growth.

We are proud of offering equal opportunities and a close, welcoming environment. All people receive consideration for our vacant positions, without distinction of gender, age, race, religion, identity, sexual orientation, origin, disability, or any other characteristic.

How to Apply

To apply for this position, please send your CV and cover letter to Meritxell Casademunt (meritxell.casademunt@fetalifetech.com).

Candidate Specifications

Criteria	Essential or Desirable	Assessment method (A-Application C / Coding Test /I-Interview)
Qualifications, experience and knowledge		
IT, Engineering or a related field / Full-stack career	Essential	A
Master's degree in IT, Engineering or a related field	Desirable	A
International Experience	Desirable	A
Experience as Full Stack Developer (3 or more years)	Essential	A + I
Strong proficiency in Web APIs (C# / .NET)	Essential	A + C
Strong proficiency in TypeScript & React	Desirable	A + C
Experience working with SQL and Entity Framework Core	Essential	A + C
Experience developing UIs	Desirable	A + C
Skills and abilities		
Excellent communication skills in English or Spanish.	Essential	I
Ability to work under pressure	Desirable	I
Ability to prioritize and organize own workload and meet time-critical schedules	Essential	I
Attention to detail	Essential	A + C
Good organizational and time management skills	Essential	I
Ability to work confidentially and pro-actively	Essential	A
A flexible approach to working extra to accommodate time consuming projects, persistence and self-motivation.	Desirable	I