

Versatile software engineer with a passion for learning and tackling complex challenges. I thrive on exploring new technologies and delivering impactful solutions. Currently seeking my next adventure.

Experience

- 2019–2025 **Sonos Voice Control**, *Senior then Principal Software Engineer*, Sonos
Acted as the tech lead for an 8-person team integrating Snips technology into Sonos Players, developing a private, on-device voice assistant for music. I architected the Rust dynamic library, redesigned the orchestrator for better maintainability and testability, created a framework for action code development, and managed communication between the voice control library and the core player (C++ monolithic app). Additionally, I crafted debug web interfaces to support development. Post-GA release in 2022, I led architectural changes for future versions, focusing on inter-player communication, and extended library support to iOS and Android apps for a new Bluetooth product.
- 2017–2019 **Snips Voice**, *Senior Software Engineer*, Snips
Contributed as part of the engineering team to develop a private, on-device voice assistant using a Rust microservice architecture with MQTT communication. Worked closely with data scientists to integrate machine learning models, defined interfaces for various services, maintained the Android port, and designed the developer experience for our SDKs.
- 2016–2017 **Snips Queries**, *Senior Software Engineer*, Snips
Worked on a mobile SDK that provided an NLU model, initially developed in three languages: Kotlin for Android, Swift for iOS, and Python for data scientists. Focused primarily on the Kotlin implementation, introducing code generation from common specification files to ensure consistency across platforms. Later, I replaced the complex code generators with a Rust library, providing a more maintainable and flexible solution.
- 2016 **Snips Android Mobile app**, *Senior Android Engineer*, Snips
Worked on an experimental app with a team of enthusiasts exploring machine learning and the latest mobile technologies like Kotlin. Implemented a knowledge graph using recursive CTE in SQLite, experimented with Android system overlays for bubble interfaces, and harnessed the great power—but also great responsibilities—of the Android accessibility service to scrape all on-screen content to feed local machine learning models.
- 2015–2016 **OSM contribution app**, *Software Engineer*, DesignMyApp, Altendis
Worked part-time on this in-house Android app for my consulting firm, leading the project's architecture. Provided mentorship and conducted code reviews for interns who handled the majority of the implementation.
- 2013–2016 **Lafarge eBL**, *Software Engineer*, Lafarge France, Altendis
Developed and maintained an Android app for digitizing delivery notes, using Android Annotations, JTS for geofencing, and a Java backend with Spring, Hibernate, and iText. Created a new app version for the aggregates product line utilizing Bluetooth to send delivery notes to phones, because quarries are big holes in the ground with no cell reception.
- 2012–2013 **Lafarge Customer Portal**, *Software Engineer*, Lafarge Group, Altendis
Worked on a boring web app using JEE (Spring, Hibernate) and JavaScript (jQuery) for Lafarge clients to order delivery trucks full of concrete, cement, or aggregates and view invoices. Had fun implementing a system to manage deployments across multiple geographies and product lines with varying requirements. Addressed security issues, including identifying an XSS vulnerability on the homepage on day one. Are you really still reading this? :P

Notable open-source contributions

- since 2017 Maintainer of **dinghy**, a Rust-based cross-compilation helper for embedded Linux, Android, and iOS. I'm focusing particularly on Android and I led a major refactoring in 2022, enhancing compile speed and simplifying maintenance.
- 2023–2024 Contributor to **cbindgen**, a tool for generating C headers from Rust. I restructured the codebase to abstract the language backend, enabling support for additional languages. Awaiting merge for a PR adding Java support.
- 2022 Designed and developed **crossometer**, a GPS variometer and altimeter for paragliding. Created the device from scratch, including a custom PCB with an ESP32 and sensors, custom Rust firmware, and a 3D-printed case.

Education

- 2007–2012 **Ingénieur INSA**, *Architecture des Systèmes d'Information*, INSA Rouen

Skills

Programming	Rust, Kotlin, Java	OS of choice	Linux (arch btw)
Languages	French, English		

Outside of work

- Sports Paragliding (IPPI Level 4), mountain bike, ski, beat saber
- Hobbies Reading, board games, video games, roleplaying (GM), 3D printing, photography