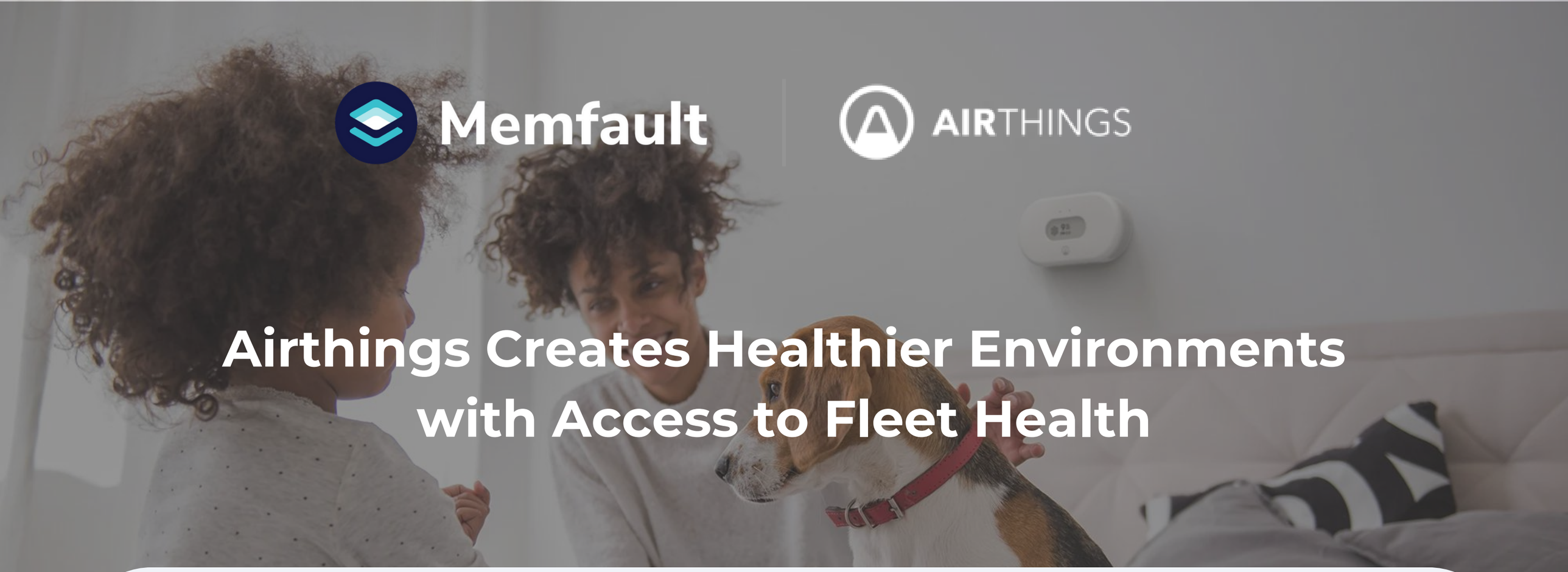

Airthings Creates Healthier Environments with Access to Fleet Health

> *We partner with Memfault because they enable us to proactively identify product issues in the field, prioritize them and implement solutions.*
>
> **Audhild Randa**
>
> Chief Operation Officer, Airthings

About Airthings

Established in 2008, Airthings, a global technology company, is on a mission to ensure that people around the world take control of their air quality through simple, sustainable, and accessible technology solutions while optimizing energy consumption in buildings - making radon and air quality solutions an essential and universal element for every business, building or home.

Company Profile

- **Industry:** Environmental
- **Product:** Air Quality Monitor
- **Location:** Oslo, Norway
- **Chipset:** STM32, CC13XX
- **Operating System:** FreeRTOS, TI-RTOS
- **Connectivity:** LTE, BLE, SUB-GHz, WiFi

Benefits

- **More confidence** when shipping releases with visibility into issues/crashes
- **Reduced issue detection and resolution time** for rare bugs in the field
- **Switched from a reactive to a proactive approach** saving engineering time and resources

Challenge

Airthings had issues with connected devices in the field but hadn’t used troubleshooting tools before. Without the proper tools in place, Airthings did not have the specific information needed to pinpoint the root cause of issues in the field. Airthings' process for troubleshooting connected devices was time-consuming and often ineffective. They needed to infer what was happening in a device based on indirect and incomplete information, such as data gaps in their cloud solution or disconnects from their Hubs.

Solution

After speaking with the Memfault team, Airthings immediately understood that Memfault could help them better understand the root cause of their challenges in the field with coredumps. Airthings got started quickly with the help of the Memfault team assisting with the initial implementation of the product by helping to port the Memfault SDK to TI-RTOS as part of Airthings’ initial prototyping. Airthings had only considered a reactive approach to issue detection and resolution until they saw the number of metrics they could track with Memfault. The Airthings team is now much more proactive, as they can monitor their new rollouts for any issues.

“Memfault has been a game-changer for our team when it comes to remote troubleshooting and fleet monitoring. We have more control over our devices, ensuring stable updates and stronger features.

Håkon Bryn
Embedded Software Manager

Results

With Memfault, the Airthings team can remotely debug devices using coredumps, which has been incredibly valuable in quickly and easily pinpointing specific issues and fixing them. For example, Memfault helped Airthings resolve an issue where a customer struggled with a bug due to a unique WiFi setup. Without Memfault, they could not replicate it when troubleshooting and would have spent weeks trying to resolve it, because the bug was so rare. Memfault's automated error analysis process has saved countless engineering hours spent troubleshooting devices and managing RMA's.

They also use Memfault's performance monitoring capabilities frequently and have implemented many fleet-wide metrics that they track daily. By shipping staged rollouts to device cohorts, they can easily monitor key metrics like communication errors and reboots before shipping the updates to the full fleet giving them more control over their devices. Having access to these key metrics enables them to ship more features knowing that their releases are making their devices stronger and more stable, not causing more errors.

You can **learn more** about Airthings **here**.

> *Memfault makes debugging issues in the field and finding the frequency of errors easier.*
>
> ***Jon-Arne Pederssen***
> *Senior Embedded Developer in Firmware*

> *It's vital to Airthings that we act as swiftly as possible to provide uninterrupted, reliable service to our customers, and Memfault is a key tool for us in doing this.*
>
> ***Audhild Randa***
> *Chief Operation Officer*