

Rust is the future of embedded systems

As software complexity grows and demands for cybersecurity, energy efficiency, and regulatory compliance rise, businesses need resilient, high-performing solutions. Rust offers the perfect answer with its design centered on security, memory safety, and concurrency without data races, allowing teams to avoid costly recalls and scale quickly.

Rust's interoperability with C/C++, modern tooling, and support for embedded systems make it the ideal choice for developing Al, machine learning, and increasingly integrated systems.

Why Rust is ideal for critical systems:

- Memory Safety without garbage collection: Rust guarantees memory safety at compile-time, preventing common issues like null pointer dereferencing and buffer overflows, crucial for resourceconstrained embedded systems.
- Low-level control with high performance: Rust offers the control needed for hardware interaction while maintaining high performance, making it perfect for embedded systems that require efficient resource usage.
- Concurrency without data races:
 Rust's safe concurrency model
 allows developers to write parallel
 code without data races, essential
 for the real-time, multi-threaded
 operations common in embedded
 applications.

Where to talk about Rust at #ew25:

Hall 4

- Bluewind Srl (4-142)
- Embecosm (4-146)
- TÜV SÜD Product Service GmbH (4-149)
- Felgo GmbH (4-201b)
- Lauterbach GmbH (4-210)
- Toradex AG (4-240)
- Vector Informatik GmbH (4-278)
- Slint (4-300)
- KDAB (4-302)
- TrustInSoft SAS (4-340)
- ITK Engineering GmbH (4-352)
- SEGGER Microcontroller GmbH (4-367)
- Ferrous Systems GmbH (4-402)
- eSOL Co., Ltd. (4-417)
- Arm (4-504)
- Eclipse Foundation (4-554)
- Lynx (4-662)

Hall 5

- Exein SpA (5-270)
- Rust on Embedded Tweede golf B.V., Sarif, OneVariable GmbH (5-280)
- Arcane Four Software (5-382)
- JetBrains s.r.o. (5-474)