Compiler Engineers (m/f) for Autonomous Driving and Custom AI Hardware

Location: Málaga, Spain

General Description

Cortus is a fabless semiconductor manufacturing group with a presence in several EU countries. The company designs and sells RISC-V microcontrollers (MCUs) and AI inference chips for automotive and avionics markets.

Cortus develops a broad portfolio of proprietary IP and provides a complete software ecosystem, including IDE, compiler, debugger, SDK, and development boards.

Over 18 billion devices have been produced using Cortus processors and IP, with around 1.2 billion units shipped annually. Cortus is also one of the dozen Platinum Founding Member of the RISC-V Foundation.

Cortus is at the forefront of advanced AI inference chip development. We are seeking Software Engineers (m/f), with a focus on compiler engineering for AI applications, to join our R&D Center of Excellence in Málaga.

Role Overview

We are building core technology for real-time AI in autonomous driving. Our focus is not on training larger models, but on making them run efficiently and reliably on specialized hardware, this is fundamentally a systems problem.

We are looking for engineers to develop the “compiler” layer that takes trained AI models (ONNX) and maps them onto our custom AI hardware for high-performance inference.

You will work at the intersection of:

- Compiler design
- Performance optimization
- Neural network execution

Key Responsibilities

- Convert ONNX models (e.g. YOLO-style networks) into optimized execution graphs
- Map neural network layers onto compute resources under memory, bandwidth, and latency constraints
- Optimize execution through graph transformations (splitting, fusion, scheduling)
- Manage and optimize data movement across the system
- Build tools and infrastructure to ensure robustness and scalability
- Collaborate closely with architecture and system teams

Profile

- Strong understanding of how software executes on hardware

- Ability to reason about performance trade-offs (compute vs memory vs communication)
- Experience with compilers, graph-based systems, or complex software stacks
- Good understanding of neural network structures and execution
- Fluent in English (written and spoken)

Nice to Have

- Experience with compiler frameworks (e.g., LLVM, MLIR, TVM)
- Experience optimizing large-scale or low-latency systems
- Familiarity with ONNX or deep learning frameworks

Why Join Us

- You will define how AI models actually run—not how they are trained
- Your work will have a direct impact on real-world performance
- You will work on challenging problems at the intersection of software and real-world hardware constraints

How to Apply

Please send your CV and cover letter to: **hr@cortus.com**