

# arm

## Arm France 2023 Internships CPU Engineering



As we are shifting in a new era of AI, integrating our Central Engineering – CPU teams in [Sophia Antipolis](#) will offer you the excitements of shaping the Future Wave of Computing that will be fundamental in making the world we live in, more efficient and more sustainable.

[careers.arm.com](https://careers.arm.com)



## CPU Microarchitecture & Design

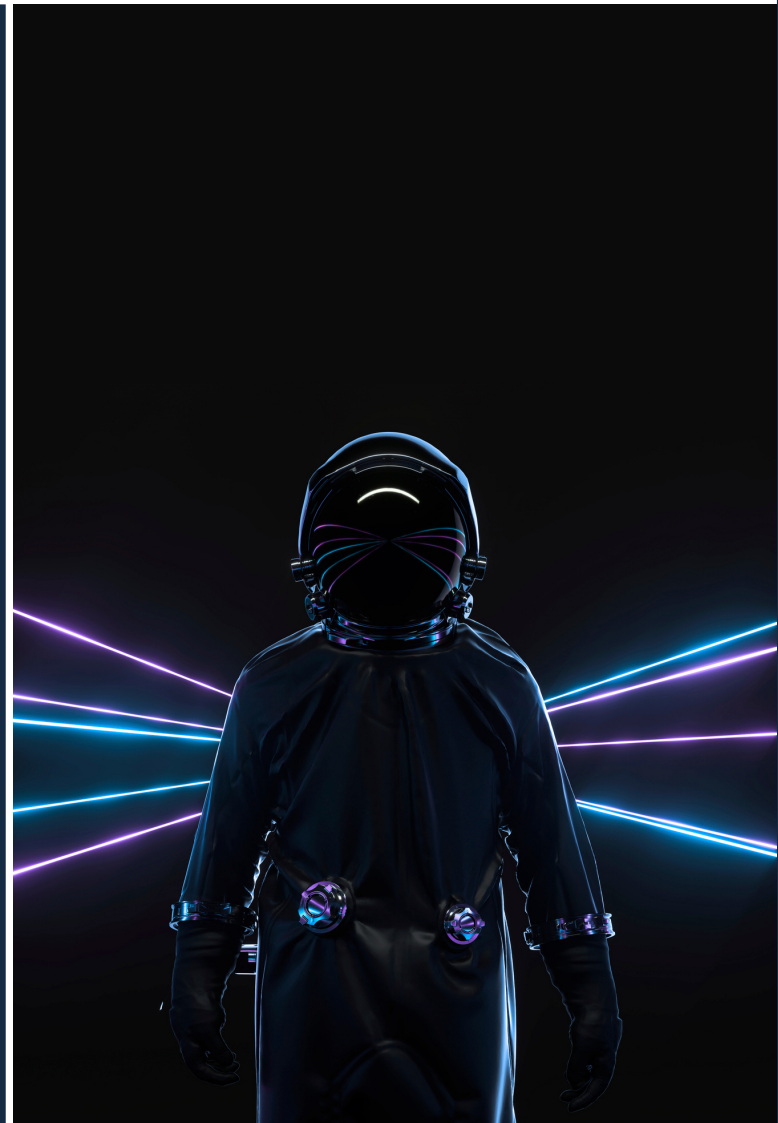
Design engineers at Arm are defining the specifications and developing the most efficient processors that will be embedded in billion devices. They are responsible for delivering the best Performance, Power and Area (PPA) solutions through the most innovative and novel approaches.

*Skills: CPU microarchitecture, HDL, scripting*

## CPU Verification

The CPU verification team verifies Arm IPs to the highest quality standards using a wide range of methodologies, tools and programming languages, from constrained random simulation to real applications on FPGA. Innovative formal methods are also at the heart of Arm verification strategy.

*Skills: System Verilog, C, C++, Python*





## CPU Performance Analysis & Modelling

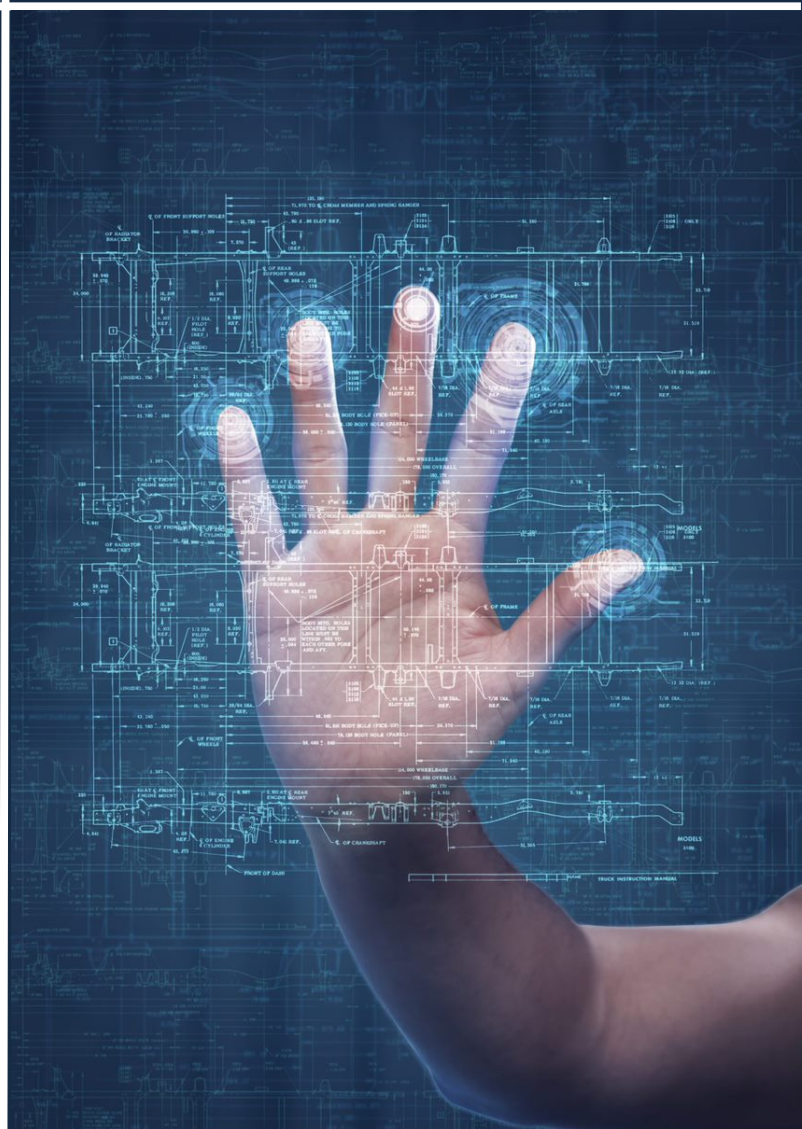
The team is in charge of all performance related activities for CPUs developed in the center. This ranges from the enablement of a configurable C-based microarchitectural model, associated studies (in collaboration with designers), up to RTL performance analysis, verification and correlation on various platform targets.

*Skills: CPU microarchitecture, C, Python*

## CPU Physical Implementation

Physical Implementation team is looking after physical parameters of products: Area, Frequency, Power, and testability. We work in a close loop with micro-architecture and cells/Macro teams to build and improve methodologies as well as quality of designs targeting 3nm and beyond.

*Skills: VLSI, HDL, TCL scripting, Synthesis, PnR*





While coming from the software side of things, microarchitecture courses piqued my interest and joining the modelling team was a perfect opportunity to combine both. While an intern, I developed a tool enabling users to spend time only on the parts of benchmarks that matter; it was a precursor to tools now widely used across Arm. [Damien class of 2018](#)

At Arm, we are very focused on reducing power consumption. I had the chance to explore this key topic and see the results of my work be integrated in a to-be-released Cortex-A CPU. [Davide class of 2020](#)

The internship was technically challenging and gratifying: I worked on improving computer arithmetic performance and my findings were directly useful to a product in development. [Nadine class of 2021](#)

My internship's objective was to find faster ways to extract accurate data from the implementation flow. It has been a great experience because it gave me the opportunity to discover Arm's 'world' and work with experienced engineers and I learned a lot. [Andrea class of 2020](#)

When I was an intern, I worked on performance investigations for TLBs. Some nice optimizations were found and led to a patent! [Paolo class of 2018](#)

