

ESPA Electronic Engineering Internship (XMOEE2907)

Apply here

Start date Early 2022

Duration 6-12 months

Languages

Good spoken and written English levels are required (B2 onwards)

Location Bristol, England

Bristol is the largest city in the South West of England. It has a strong reputation for creativity, digital innovation and social enterprise, and is the home of Oscar-winning Wallace and Gromit and urban <u>artist Banksy</u>. Offering a lively nightlife, bars and restaurants aplenty, musical diversity and many historical sites. Now you can even <u>surf</u> here! In 2017, The Times newspaper voted it 'Best Place to Live in the UK'.

Are you eligible?

Are you a registered student? Or Are you eligible to participate in the Erasmus+ programme?

Benefits

See website for details of all ESPA benefits. For all internships over 6 months, additional benefits will be paid. Details available at interview.

Role

This is a fantastic role for an enthusiastic computer science or electronics student to gain practical experience within this innovative, class leading company, developing advanced chipsets for the fast-growing market of the Artificial Intelligence of Things(AloT), commonly known as Smart technologies and devices. Mentored throughout, you will be assisting the chip team to develop complex System on Chip(SoC) silicon products using state-of-the-art tools and techniques. If you are interested in gaining highly sought-after industry skills and experience, then this is an opportunity not to be missed. Be **Smart**, apply today!

Tasks

- Understanding key aspects of the relationship between chip development, architecture and software, and how these impact silicon hardware
- Assist developing and reviewing specifications for hardware blocks, and plans for functional verification
- Development, modification, and debug of RTL
- Functional verification of modules and features, including use of modern techniques such as pseudo-random stimulus, functional coverage, UVM and properties/assertions
- Work with the physical implementation team to understand interaction between logical and physical design, and achieve targets such as speed, area, and power

Desired Skills

- Studying electronics, microelectronics or computer science, with significant digital hardware specialization.
- Understanding of digital logic and basic chip design concepts
- Exposure to Hardware Description Languages (HDL, RTL), such as Verilog or VHDL
- Some knowledge of digital simulator (CAD) tools
- Some exposure to functional verification methodologies and techniques
- An understanding of microprocessor architectures and features
- Using lab equipment to take system measurements, such as frequencies edge-rates
- Understanding of high-level programming languages, e.g. C, and low-level programming in assembly
- Ability to develop and modify scripts used for automation, (e.g. Python, Perl)
- Knowledge of working in Linux

The Host Company

The host company is a market leader in the development of processors for the rapidly expanding market of the Artificial Intelligence of Things(AIoT). Their cutting-edge technology is used in voice activation devices, most famously Alexa, smart homes and cities, intelligent lighting, facial recognition security systems, and vital signs monitoring for healthcare applications to name but a few. Always pushing the boundaries, they are seeking like-minded people to join them.