



# ESPA

## Software Development Engineer (Compiler and Toolchain) Internship (XMOCO2205)

### Apply here

#### Start date

September 2019

#### Duration

6 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 artist Banksy. Offering a lively nightlife, bars and restaurants aplenty, musical diversity and many historical sites, 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. Mentored throughout, you will contribute to a highly complex software project during a period of real change. You will have the opportunity to learn about language design, compiler mechanics whilst working with a highly skilled software team, thus learning invaluable "hands-on" tools development and programming skills. If you are interested in a career in this cutting-edge field, then this is an opportunity not to be missed.

### Tasks

- Assist in the development and maintenance of the next evolution of tools which will address next-generation silicon devices and changing trends in software development and AI
- Developing and maintaining the C, C++ and XC compilers
- Testing and debugging
- Collaboration with engineers from a range of disciplines to deliver complete, production ready systems
- Participate in engineering focused project meetings as well as joining strategy meetings

### Desired Skills

- A degree in Electronic Engineering, Physics or other relevant
- Experience with C++, C or similar languages
- Experience with scripting languages such as Matlab, Python or Bash
- Knowledge of commonly used data structures and algorithms
- An appreciation of how high-level languages are compiled and translated

### The Host Company

The host company is a market leader in the supply of voice and music processing and control ICs (integrated circuits), to customers including Harmon, Sony, JVC and JBL. They are currently focusing on the development of their next generation and most comprehensive Voice User Interface (VUI) controller solutions for Internet of Things (IoT) devices. Their far field voice interfaces are designed to be integrated seamlessly into any environment and have already been qualified by Amazon for use with Alexa. With substantial financial backing, this company is set to become one of the major players in the audio field.